CAMPS AND TRAILS IN CHINA

ROY CHAPMAN ANDREWS
AND
YVETTE BORUP ANDREWS

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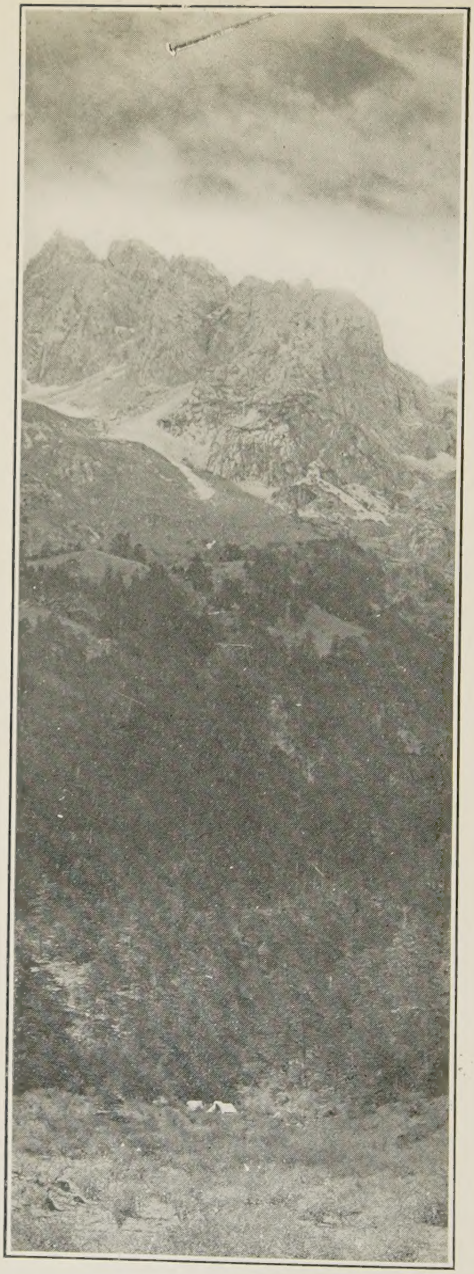

Our Camp on the Snow Mountain
at an Altitude of 12,000 Feet

CAMPS AND TRAILS IN CHINA

A NARRATIVE OF EXPLORATION, ADVENTURE, AND SPORT IN LITTLE-KNOWN CHINA

BY

ROY CHAPMAN ANDREWS, M.A.

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AND

YVETTE BORUP ANDREWS

PHOTOGRAPHER OF THE ASIATIC ZOÖLOGICAL EXPEDITION

ILLUSTRATED

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YIC I
AE I

THIS BOOK IS DEDICATED TO
PRESIDENT HENRY FAIRFIELD OSBORN
AS AN EXPRESSION OF GRATITUDE
AND ADMIRATION

22254

"Let us probe the silent places, let us seek what luck betide us:
Let us journey to a lonely land I know.
There's a whisper on the night-wind, there's a star agleam to guide us,
And the Wild is calling, calling . . . let us go."

—*Service.*

PREFACE

The object of this book is to present a popular narrative of the Asiatic Zoölogical Expedition of the American Museum of Natural History to China in 1916-17. Details of a purely scientific nature have been condensed, or eliminated, and emphasis has been placed upon our experiences with the strange natives and animals of a remote and little known region in the hope that the book will be interesting to the general reader.

The scientific reputation of the Expedition will rest upon the technical reports of its work which will be published in due course by the American Museum of Natural History. To these reports we would refer those readers who desire more complete information concerning the results of our researches. At the time the manuscript of this volume was sent to press the collections were still undergoing preparation and the study of the different groups had just begun.

Although the book has been largely written by the senior author, his collaborator has contributed six chapters marked with her initials; all the illustrations are from her photographs and continual use has been made of her daily journals; she has, moreover, materially assisted in reference work and in numerous other ways.

The information concerning the relationships and distribution of the native tribes of Yün-nan is largely drawn from the excellent reference work by Major H. R. Davies and we have followed his spelling of Chinese names.

Parts of the book have been published as separate articles in the *American Museum Journal*, *Harper's Magazine*, and *Asia* and to the editors of the above publications our acknowledgments are due.

That the Expedition obtained a very large and representa-

tive collection of small mammals is owing in a great measure to the efforts of Mr. Edmund Heller, our companion in the field. He worked tirelessly in the care and preservation of the specimens, and the fact that they reached New York in excellent condition is, in itself, the best testimony to the skill and thoroughness with which they were prepared.

Our Chinese interpreter, Wu Hung-tao, contributed largely to the success of the Expedition. His faithful and enthusiastic devotion to our interests and his tact and resourcefulness under trying circumstances won our lasting gratitude and affectionate regard.

The nineteen months during which we were in Asia are among the most memorable of our lives and we wish to express our deepest gratitude to the Trustees of the American Museum of Natural History, and especially to President Henry Fairfield Osborn, whose enthusiastic endorsement and loyal support made the Expedition possible. Director F. A. Lucas, Dr. J. A. Allen and Mr. George H. Sherwood were unfailing in furthering our interests, and to them we extend our hearty thanks.

To the following patrons, who by their generous contributions materially assisted in the financing of the Expedition, we wish to acknowledge our great personal indebtedness as well as that of the Museum; Mr. and Mrs. Charles L. Bernheimer, Mr. and Mrs. Sidney M. Colgate, Messrs. George Bowdoin, Lincoln Ellsworth, James B. Ford, Henry C. Frick, Childs Frick, and Mrs. Adrian Hoffman Joline.

The Expedition received many courtesies while in the field from the following gentlemen, without whose coöperation it would have been impossible to have carried on the work successfully. Their services have been referred to individually in subsequent parts of the book: The Director of the Bureau of Foreign Affairs of the Province of Yün-nan; M. Georges Chemin Dupontès, Director de l'Exploration de la Compagnie Française des Chemins de Fer de l'Indochine et du Yün-nan, Hanoi, Tonking; M. Henry Wilden, Consul de France, Shang-

hai; M. Kraemer, Consul de France, Hongkong; Mr. Howard Page, Standard Oil Co., Yün-nan Fu; the Hon. Paul Reinsch, Minister Plenipotentiary and Envoy Extraordinary to the Chinese Republic, Mr. J. V. A. McMurray, First Secretary of the American Legation, Peking; Mr. H. G. Evans, British-American Tobacco Co., Hongkong; the Rev. William Hanna, Ta-li Fu; the Rev. A. Kok, Li-chang Fu; Ralph Grierson, Esq., Teng-yueh; Herbert Goffe, Esq., H. B. M. Consul General, Yün-nan Fu; Messrs. C. R. Kellogg, and H. W. Livingstone, Foochow, China; the General Passenger Agent, Canadian Pacific Railroad Company, Hongkong; and the Rev. H. R. Caldwell, Yenping, who has read parts of this book in manuscript and who through his criticisms has afforded us the benefit of his long experience in China.

To Miss Agnes F. Molloy and Miss Anna Katherine Berger we wish to express our appreciation of editorial and other assistance during the preparation of the volume.

Roy Chapman Andrews
Yvette Borup Andrews

Justamere Home,
Lawrence Park,
Bronxville, N. Y.

May 10, 1917.

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CAMPS AND TRAILS IN CHINA

CHAPTER I

THE OBJECT OF THE EXPEDITION

THE earliest remains of primitive man probably will be found somewhere in the vast plateau of Central Asia, north of the Himalaya Mountains. From this region came the successive invasions that poured into Europe from the east, to India from the north, and to China from the west; the migration route to North America led over the Bering Strait and spread fanwise south and southeast to the farthest extremity of South America. The Central Asian plateau at the beginning of the Pleistocene was probably less arid than it is today and there is reason to believe that this general region was not only the distributing center of man but also of many of the forms of mammalian life which are now living in other parts of the world. For instance, our American moose, the wapiti or elk, Rocky Mountain sheep, the so-called mountain goat, and other animals are probably of Central Asian origin.

Doubtless there were many contributing causes to the extensive wanderings of primitive tribes, but as they were primarily hunters, one of the most important

must have been the movements of the game upon which they lived. Therefore the study of the early human races is, necessarily, closely connected with, and dependent upon, a knowledge of the Central Asian mammalian life and its distribution. No systematic palæontological, archæological, or zoölogical study of this region on a large scale has ever been attempted, and there is no similar area of the inhabited surface of the earth about which so little is known.

The American Museum of Natural History hopes in the near future to conduct extensive explorations in this part of the world along general scientific lines. The country itself and its inhabitants, however, present unusual obstacles to scientific research. Not only is the region one of vast intersecting mountain ranges, the greatest of the earth, but the climate is too cold in winter to permit of continuous work. The people have a natural dislike for foreigners, and the political events of the last half century have not tended to decrease their suspicions.

It is possible to overcome such difficulties, but the plans for extensive research must be carefully prepared. One of the most important steps is the sending out of preliminary expeditions to gain a general knowledge of the natives and fauna and of the conditions to be encountered. For the first reconnoissance, which was intended to be largely a mammalian survey, the Asiatic Zoölogical Expedition left New York in March, 1916.

Its destination was Yün-nan, a province in southwestern China. This is one of the least known parts of the Chinese Republic and, because of its southern latitude and high mountain systems, the climate and faunal range is very great. It is about equal in size to

the state of California and topographically might be likened to the ocean in a furious gale, for the greater part of its surface has been thrown into vast mountain waves which divide and cross one another in hopeless confusion.

Yün-nan is bordered on the north by Tibet and S'suchuan, on the west by Burma, on the south by Tonking, and on the east by Kwei-chau Province. Faunistically the entire northwestern part of Yün-nan is essentially Tibetan, and the plateaus and mountain peaks range from altitudes of 8,000 feet to 20,000 feet above sea level. In the south and west along the borders of Burma and Tonking, in the low fever-stricken valleys, the climate is that of the mid-tropics, and the native life, as well as the fauna and flora, is of a totally different type from that found in the north.

The natives of Yün-nan are exceptionally interesting. There are about thirty non-Chinese tribes in the province, some of whom, such as the Shans and Lolos, represent the aboriginal inhabitants of China, and it is safe to say that in no similar area of the world is there such a variety of language and dialects as in this region.

Although the main work of the Expedition was to be conducted in Yün-nan, we decided to spend a short time in Fukien Province, China, and endeavor to obtain a specimen of the so-called "blue tiger" which has been seen twice by the Reverend Harry R. Caldwell, a missionary and amateur naturalist, who has done much hunting in the vicinity of Foochow.

The white members of the first Asiatic Zoölogical Expedition included Mr. Edmund Heller, my wife (Yvette Borup Andrews) and myself. A Chinese in-

terpreter, Wu Hung-tao, with five native assistants and ten muleteers, completed the personnel.

Mr. Heller is a collector of wide experience. His early work, which was done in the western United States and the Galápagos Islands, was followed by many years of collecting in Mexico, Alaska, South America, and Africa. He first visited British East Africa with Mr. Carl E. Akeley, next with ex-President Theodore Roosevelt, and again with Mr. Paul J. Rainey. During the Asiatic Zoölogical Expedition Mr. Heller devoted most of his time to the gathering and preparation of small mammals. He joined our party late in July in China.

Mrs. Andrews was the photographer of the Expedition. She had studied photography as an amateur in Germany, France, and Italy, as well as in New York, and had devoted especial attention to the taking of photographs in natural colors. Such work requires infinite care and patience, but the results are well worth the efforts expended.

Wu Hung-tao is a native of Foochow, China, and studied English at the Anglo-Chinese College in that city. He lived for some time in Teng-yueh, Yün-nan, in the employ of Mr. F. W. Carey, Commissioner of Customs, and not only speaks mandarin Chinese but also several native dialects. He acted as interpreter, head "boy," and general field manager. My own work was devoted mainly to the direction of the Expedition and the hunting of big game.

In order to reduce the heavy transportation charges we purchased only such equipment in New York as could not be obtained in Shanghai or Hongkong. Messrs. Shoverling, Daly & Gales furnished our guns,

Yvette Borup Andrews
with a Pet Yün-nan Squirrel

Edmund Heller

Roy Chapman Andrews and a Goral

ammunition, tents, and general camp equipment, and gave excellent satisfaction in attention to the minor details which often assume alarming importance when an expedition is in the field and defects cannot be remedied. All food and commissary supplies were purchased in Hongkong (*see* Chapter IX).

. . . . .

When the announcement of the Expedition was made by the American Museum of Natural History it received wide publicity in America and other parts of the world. Immediately we began to discover how many strange persons make up the great cities of the United States, and we received letters and telegrams from hundreds of people who wished to take part in the Expedition. Men and boys were the principal applicants, but there was no lack of women, many of whom came to the Museum for personal interviews.

Most of the letters were laughable in the extreme. One was from a butcher who thought he might be of great assistance in preparing our specimens, or defending us from savage natives; another young man offered himself to my wife as a personal bodyguard; a third was sure his twenty years' experience as a waiter would fit him for an important position on the Expedition, and numerous women, young and old, wished to become "companions" for my wife in those "drear wastes."

Applicants continued to besiege us wherever we stopped on our way across the continent and in San Francisco until we embarked on the afternoon of March 28 on the S. S. *Tenyo Maru* for Japan.

Our way across the Pacific was uneventful and as the great vessel drew in toward the wharf in Yokohama she was boarded by the usual crowd of natives. We

were standing at the rail when three Japanese approached and, bowing in unison, said, "We are report for leading Japanese newspaper. We wish to know all thing about Chinese animal." Evidently the speech had been rehearsed, for with it their English ended abruptly, and the interview proceeded rather lamely, on my part, in Japanese.

Japan was reveling in the cherry blossom season when we arrived and for a person interested in color photography it was a veritable paradise. We stayed three weeks and regretfully left for Peking by way of Korea. But before we continue with the story of our further travels, we would like briefly to review the political situation in China as a background for our early work in the province of Fukien.

CHAPTER II

CHINA IN TURMOIL

During the time the Expedition was preparing to leave New York, China was in turmoil. Yuan Shi-kai was president of the Republic, but the hope of his heart was to be emperor of China. For twenty years he had plotted for the throne; he had been emperor for one hundred miserable days; and now he was watching, impotently, his dream-castles crumble beneath his feet. Yuan was the strong man of his day, with more power, brains, and personality than any Chinese since Li-Hung Chang. He always had been a factor in his political world. His monarchial dream first took definite form as early as 1901 when he became viceroy of Chi-li, the province in which Peking is situated.

It was then that he began to modernize and get control of the army which is the great basis of political power in China. Properly speaking, there was not, and is not now, a Chinese national army. It is rather a collection of armies, each giving loyalty to a certain general, and he who secures the support of the various commanders controls the destiny of China's four hundred millions of people regardless of his official title.

Yuan was able to bind to himself the majority of the leading generals, and in 1911, when the Manchu dynasty was overthrown, his plots and intrigues began to bear fruit. By crafty juggling of the rebels and Manchus he managed to get himself elected president

of the new republic, although he did not for a moment believe in the republican form of government. He was always a monarchist at heart but was perfectly willing to declare himself an ardent republican so long as such a declaration could be used as a stepping stone to the throne which he kept ever as his ultimate goal.

As president he ruled with a high hand. In 1913 there was a rebellion in protest against his official acts but he defeated the rebels, won over more of the older generals, and solidified the army for his own interests, making himself stronger than ever before.

At this time he might well have made a *coup d'état* and proclaimed himself emperor with hardly a shadow of resistance, but with the hereditary caution of the Chinese he preferred to wait and plot and scheme. He wanted his position to be even more secure and to have it appear that he reluctantly accepted the throne as a patriotic duty at the insistent call of the people.

Yuan's ways for producing the proper public sentiment were typically Chinese but entirely effective, and he was making splendid progress, when in May, 1915, Japan put a spoke in his wheel of fortune by taking advantage of the European war and presenting the historical twenty-one demands, to most of which China agreed.

This delayed his plans only temporarily, and Yuan's agents pushed the work of making him emperor more actively than ever, with the result that the throne was tendered to him by the "unanimous vote of the people." To "save his face" he declined at first but at the second offer he "reluctantly" yielded and on December 12, 1915, became emperor of China.

But his triumph was short-lived, for eight days later

tidings of unrest in Yün-nan reached Peking. General Tsai-ao, a former military governor of the province, appeared in Yün-nan Fu, the capital, and, on December 23, sent an ultimatum to Yuan stating that he must repudiate the monarchy and execute all those who had assisted him to gain the throne, otherwise Yün-nan would secede; which it forthwith did on December 25.

Without doubt this rebellion was financed by the Japanese who had intimated to Yuan that the change from a republican form of government would not meet with their approval. The rebellion spread rapidly. On January 21, Kwei-chau Province, which adjoins Yün-nan, seceded, and, on March 13, Kwang-si also announced its independence.

About this time the Museum authorities were becoming somewhat doubtful as to the advisability of proceeding with our Expedition. We had a long talk with Dr. Wellington Koo, the Chinese Minister to the United States, at the Biltmore Hotel in New York. Dr. Koo, while certain that the rebellion would be short-lived, strongly advised us to postpone our expedition until conditions became more settled. He offered to cable Peking for advice, but we, knowing how unwelcome to the government of the harassed Yuan would be a party of foreigners who wished to travel in the disturbed area, gratefully declined and determined to proceed regardless of conditions. We hoped that Yuan would be strong enough to crush this rebellion as he had that of 1913, but day by day, as we anxiously watched the papers, there came reports of other provinces dropping away from his standard.

On the *Tenyo Maru* we met the Honorable Charles Denby, an ex-American Consul-General at Shanghai

and former adviser to Yuan Shi-kai when he was viceroy of Chi-li. Mr. Denby was interested in obtaining a road concession near Peking and was then on his way to see Yuan. His anxiety over the political situation was not less than ours and together we often paced the decks discussing what might happen; but every wireless report told of more desertions to the ranks of the rebels.

It seemed to be the beginning of the end, for Yuan had lost his nerve. He had decided to quit, and one hundred days after he became emperor elect he issued a mandate canceling the monarchy and restoring the republic. But the rebellious provinces were not satisfied and demanded that he get out altogether.

About this time we reached Peking, literally blown in by a tremendous dust storm which seemed an elemental manifestation of the human turmoil within the grim old walls. Our cousin, Commander Thomas Hutchins, Naval Attaché of the American Legation, was awaiting us on the platform, holding his hat with one hand and wiping the dust from his eyes with the other.

The news we received from him was by no means comforting for in the Legation pessimism reigned supreme. The American Minister, Dr. Reinsch, was not enthusiastic about our going south regardless of conditions, but nevertheless he set about helping us to obtain the necessary visé for our passports.

We wished first to go to Foochow, in Fukien Province, where we were to hunt tiger until Mr. Heller joined us in July for the expedition into Yün-nan. Fukien was still loyal to Yuan, but the strong Japanese influence in this province, which is directly opposite the

island of Formosa, was causing considerable uneasiness in Peking.

We were armed with telegrams from Mr. C. R. Kellogg, of the Anglo-Chinese College, with whom we were to stay while in Foochow, assuring us that all was quiet in the province, and through the influence of Dr. Reinsch, the Chinese Foreign Office viséd our passports. The huge red stamp which was affixed to them was an amusing example of Chinese "face saving." First came the seal of Yuan's impotent dynasty of Hung Hsien, signifying "Brilliant Prosperity," and directly upon it was placed the stamp of the Chinese Republic. One was almost as legible as the other and thus the Foreign Office saved its face in whichever direction the shifting cards of political destiny should fall.

At a luncheon given by Dr. Reinsch at the Embassy in Peking, we met Admiral von Hintze, the German Minister, who had recently completed an adventurous trip from Germany to China. He was Minister to Mexico at the beginning of the war but had returned to Berlin incognito through England to ask the Kaiser for active sea service. The Emperor was greatly elated over von Hintze's performance and offered him the appointment of Minister to China if he could reach Peking in the same way that he had traveled to Berlin. Von Hintze therefore shipped as supercargo on a Scandinavian tramp steamer and arrived safely at Shanghai, where he assumed all the pomp of a foreign diplomat and proceeded to the capital.

The Americans were in a rather difficult position at this time because of the international complications, and social intercourse was extremely limited. Dinner guests had to be chosen with the greatest care and one

was very likely to meet exactly the same people wherever one went.

Peking is a place never to be forgotten by one who has shared its social life. In the midst of one of the most picturesque, most historical, and most romantic cities of the world there is a cosmopolitan community that enjoys itself to the utmost. Its talk is all of horses, polo, racing, shooting, dinners, and dances, with the interesting background of Chinese politics, in which things are never dull. There is always a rebellion of some kind to furnish delightful thrills, and one never can tell when a new political bomb will be projected from the mysterious gates of the Forbidden City.

We spent a week in Peking and regretfully left by rail for Shanghai. *En route* we passed through Tsinanfu where the previous night serious fighting had occurred in which Japanese soldiers had joined with the rebels against Yuan's troops. On every side there was evidence of Japan's efforts against him. In the foreign quarter of Shanghai just behind the residence of Mr. Sammons, the American Consul-General, one of Yuan's leading officers had been openly murdered, and Japanese were directly concerned in the plot. We were told that it was very difficult at that time to lease houses in the foreign concession because wealthy Chinese who feared the wrath of one party or the other were eager to pay almost any rent to obtain the protection of that quarter of the city.

A short time later it became known to a few that Yuan was seriously ill. He was suffering from Bright's disease with its consequent weakness, loss of mental alertness, and lack of concentration. French doctors were called in, but Yuan's wives insisted upon treating

him with concoctions of their own, and on June 6, shortly after three o'clock in the morning, he died.

Even on his death-bed Yuan endeavored to save his face before the country, and his last words were a reiteration of what he knew no one believed. The story of his death is told in the *China Press* of June 7, 1916:

According to news from the President's palace the condition of Yuan became critical at three o'clock in the morning. Yuan asked for his old confidential friend, Hsu Shih-chang, who came immediately. On the arrival of Hsu, Yuan was extremely weak, but entirely conscious.

With tears in his eyes, Yuan assured his old friend that he had never had any personal ambition for an emperor's crown; he had been deceived by his *entourage* over the true state of public opinion and thus had sincerely believed the people wished for the restoration of the monarchy. The desire of the South for his resignation he had not wished to follow for fear that general anarchy would break out all over China. Now that he felt death approaching he asked Hsu to make his last words known to the public.

In the temporary residence of President Li Yuan-hung, situated in the Yung-chan-hu-tung (East City) and formerly owned by Yang Tu, the prominent monarchist, the formal transfer of the power to Li-Yuan-hung took place this morning at ten o'clock. Yuan Chi-jui, Secretary of State and Premier, as well as all the members of the cabinet, Prince Pu Lun as chairman of the State Council, and other high officials were present.

The officials, wearing ceremonial dress, were received by Li-Yuan-hung in the main hall and made three bows to the new president, which were returned by the latter. The same ceremony will take place at two o'clock, when all the high military officials will assemble at the President's residence.

The Cabinet, in a circular telegram has informed all the

provinces that Vice-President Li-Yuan-hung, in accordance with the constitution, has become president of the Chinese Republic (Chung-hua-min-kuo) from the seventh instance.

So ended Yuan Shi-kai's great plot to make himself an emperor over four hundred millions of people, a plot which could only have been carried out in China. He failed, and the once valiant warrior died in the humiliation of defeat, leaving thirty-two wives, forty children and his country in political chaos.

CHAPTER III

UP THE MIN RIVER

Y. B. A.

THREE days after leaving Shanghai we arrived at Pagoda Anchorage at the mouth of the Min River, twelve miles from Foochow.

We boarded a launch which threaded its way through a fleet of picturesque fishing vessels, each one of which had a round black and white eye painted on its crescent-shaped bow. When asked the reason for this decoration a Chinese on the launch looked at us rather pityingly for a moment and then said: "No have eye. No can see." How simple and how entirely satisfactory!

The instant the launch touched the shore dozens of coolies swarmed like flies over it, fighting madly for our luggage. One seized a trunk, the other end of which had been appropriated by another man and, in the argument which ensued, each endeavored to deafen the other by his screams. The habit of yelling to enforce command is inherent with the Chinese and appears to be ineradicable. To expostulate in an ordinary tone of voice, pausing to listen to his opponent's reply, seems a psychological impossibility.

There had been a mistake about the date of our arrival at Foochow, and we were two days earlier than we had been expected, so that Mr. C. R. Kellogg, of the Anglo-Chinese College, with whom we were to

stay, was not on the jetty to meet us. We were at a loss to know where to turn amidst the chaos and confusion until a customs officer took us in charge and, judiciously selecting a competent looking woman from among the screaming multitude, told her to get two sedan chairs and coolies to carry our luggage. She disappeared and ten minutes later the chairs arrived. Dashing about among the crowd in front of us, she chose the baggage for such men as met with her approval and after the usual amount of argument the loads were taken.

We mounted our chairs and started off with apparently all Foochow following us. As far as we could see down the narrow street were the heads and shoulders of our porters. We felt as if we were heading an invading army as, with our thirty-three coolies and sixteen hundred pounds of luggage, we descended upon the homes of people whom we did not know and who were not expecting us. But our sudden arrival did not disturb the Kelloggs and our welcome was typical of the warm hospitality one always finds in the Far East.

No matter how long one has lived in China one remains in a condition of mental suspense unable to decide which is the filthiest city of the Republic. The residents of Foochow boast that for offensiveness to the senses no town can compare with theirs, and although Amoy and several other places dispute this questionable title, we were inclined to grant it unreservedly to Foochow. It is like a medieval city with its narrow, ill-paved streets wandering aimlessly in a hopeless maze. They are usually roofed over so that by no accident can a ray of purifying sun penetrate their dark corners. With no ventilation whatsoever the oppressive air reeks

with the odors that rise from the streets and the steaming houses.

In Foochow, as in other cities of China, the narrow alleys are literally choked with every form of industrial obstruction. Countless workmen plant themselves in the tiny passageways with the pigs, children, and dogs, and women bring their quilts to spread upon the stones. There is a common saying that the Chinese do little which is not at some time done on the street.

The foreign residents, including consuls of all nationalities, missionaries, and merchants, live well out of the city on a hilltop. Their houses are built with very high ceilings and bare interiors, and as the occupants seldom go into the city except in a sedan chair and have "punkahs" waving day and night, life is made possible during the intense heat of summer.

A telegram was awaiting us from the Reverend Harry Caldwell, with whom we were to hunt, asking us to come to his station two hundred miles up the river, and we passed two sweltering days repacking our outfit while Mr. Kellogg scoured the country for an English-speaking cook.

One middle-aged gentleman presented himself, but when he learned that we were going "up country," he shook his head with an assumption of great filial devotion and said that he did not think his mother would let him go. Another was afraid the sun might be too hot. Finally on the eve of our departure we engaged a stuttering Chinese who assured us that he was a remarkable cook and exceptionally honest.

If you have never heard a Chinaman stutter you have something to live for, and although we discovered that our cook was a shameless rascal he was worth all

he extracted in "squeeze," for whenever he attempted to utter a word we became almost hysterical. He sounded exactly like a worn-out phonograph record buzzing on a single note, and when he finally did manage to articulate, his "pidgin" English in itself was screamingly funny.

One day he came to the *sampan* proudly displaying a piece of beef and, after a series of vocal gymnastics, eventually succeeded in shouting: "Missie, this meat no belong die-cow. Die-cow not so handsome." Which meant that this particular piece of beef was not from an animal which had died from disease.

The first stage of our trip began before daylight. We rode in four-man sedan chairs, followed by a long procession of heavily laden coolies with our cameras, duffle-sacks, and pack baskets. The road lay through green rice fields between terraced mountains, and we jogged along first on the crest of a hill, then in the valley, passing dilapidated temples with the paint flaking off and picturesque little huts half hidden in the reeds of the winding river. It was a relief to get into the country again after passing down the narrow village streets and to breathe fresh air perfumed with honeysuckle.

A passenger launch makes the trip to Cui-kau at the beginning of the rapids, but it leaves at two o'clock in the morning and is literally crowded to overflowing with evil-smelling Chinese who sprawl over every available inch of deck space, so that even the missionaries strongly advised us against taking it. The passengers not infrequently are pushed off into the water. One of the missionaries witnessed an incident which illus-

trates in a typical way the total lack of sympathy of the average Chinese.

A coolie on the Cui-kau launch accidentally fell overboard, and although a friend was able to grasp his hand and hold him above the surface, no one offered to help him; the launch continued at full speed, and finally weakening, the poor man loosed his hold and sank. This is by no means an isolated case. Some years ago a foreign steamer was burned on the Yangtze River, and the crowds of watching Chinese did little or nothing to rescue the passengers and crew. Indeed, as fast as they made their way to shore many of them were robbed even of their clothing and some were murdered outright.

Our first day on the Min River was the most luxurious of the entire Expedition, for we were fortunate in obtaining the Standard Oil Company's launch through the kindness of Mr. Livingston, their agent. It was large and roomy, and the trip, which would have been worse than disagreeable on the public boat, was most delightful. The Min is one of the most beautiful rivers of all China with its velvet green mountains rising a thousand feet or more straight up from the water and often terraced to the summits.

Perched on the bow of our boat was a wizened little gentleman with a pigtail wrapped around his head, who said he was a pilot, but as he inquired the channel of everyone who passed and ran us aground a dozen times or more to the tremendous agitation of our captain, we felt that his claim was not entirely justified.

The river life was a fascinating, ever-changing picture. One moment we would pass a *sampan* so loaded with branches that it seemed like a small island float-

ing down the stream. Next a huge junk with bamboo-ribbed sails projecting at impossible angles drifted by, followed by innumerable smaller crafts, the monotonous chant of the boatmen coming faintly over the water to us as they passed.

When evening came we had reached Cui-kau. The *sampans* in which we were to spend eight days were drawn up on the beach with twenty or thirty others. Right above us was the straggling town looking very much like the rear view of tenement houses at home. Darkness blotted out the filth of our surroundings but could do nothing to lessen the odors that poured down from the village, and we ate our dinner with little relish.

Our beds were spread in the *sampans* which we shared in common with the four river men who formed the crew. There was only a mosquito net to screen the end of the boat, but all our surroundings were so strange that this was but a minor detail. As we lay in our cots we could look up at the stars framed in the half oval of the *sampan's* roof and listen to the sounds of the water life grow fainter and fainter as one by one the river men beached their boats for the night. It seemed only a few minutes later when we were roused by a rush of water, but it was daylight, and the boats had reached the first of the rapids which separated us from Yen-ping, one hundred and twenty miles away.

In the late afternoon we arrived at Chang-hu-fan where Mr. Caldwell stood on the shore waving his hat to us amidst scores of dirty little children and the explosion of countless firecrackers. Wherever we went crackers preceded and followed us—for when a Chinese wishes to register extreme emotion, either of joy or sor-

row, its expression always takes the form of firecrackers.

There had been a good deal of persecution of the native Christians in the district, and only recently a band of soldiers had strung up the native pastor by the thumbs and beaten him senseless. He was our host that night and seemed to be a bright, vivacious, little man but quite deaf as a result of his cruel treatment. He never recovered and died a few weeks later. Mr. Caldwell had come to investigate the affair, for the missionaries are invested by the people themselves with a good deal of authority.

We spent that night in the parish house just behind the little church, a bare schoolroom being turned over to us for our use, and it seemed very luxurious after we had set up our cots, tables, chairs, and bath tub; but the house was in the center of the town and the high walls shut out every breath of pure air. The barred windows opened on a street hardly six feet wide, and while we were preparing for bed there was a buzz of subdued whispers outside. We switched on a powerful electric flashlight and there stood at least forty men, women and children gazing at us with rapt attention, but they melted away before the blinding glare like snow in a June sun.

That night was not a pleasant one. The heat was intense, the mosquitoes worse, and every dog and cat in the village seemed to choose our court yard as a dueling ground in which to settle old scores. The climax was reached at four o'clock in the morning, when directly under our windows there came a series of ear-splitting squeals followed by a horrible gurgle. The neighbors had chosen that particular spot and hour to

kill the family pig, and the entire process which followed of sousing it in hot water and scraping off the hair was accompanied by unceasing chatter. Boiling with rage we dressed and went for a walk, vowing not to spend another night in the place but to sleep in the *sampans.*

On the whole our river men were nice fellows but they had the love of companionship characteristic of all Chinese and the inherent desire to huddle together as closely as possible wherever they were. On the way up the river to Yuchi every evening they insisted on stopping at some foul-smelling village, and it was difficult to induce them to spend the night away from a town. Moreover, at our stops for luncheon they would invariably ignore a shady spot and choose a sand bank where the sun beat down like a blast furnace.

The Chinese never appear to be affected by the sun and go bareheaded at all seasons of the year, shading their eyes with one hand or a partly opened fan. A fan is the prime requisite, and it is not uncommon to see coolies almost devoid of clothing, dragging a heavy load and with the perspiration streaming from their naked bodies, energetically fanning themselves meanwhile.

Mr. Caldwell was *en route* to Yuchi, one of his mission stations far up a branch of the Min River, and as there was a vague report of tiger in that vicinity we joined him instead of proceeding directly to Yen-ping. The tiger story was found to be merely a myth, but our trip was made interesting by meeting Miss Mabel Hartford, the only foreign resident of the place. She has lived in Yuchi for two years and at one time did not see a white person for eight months with the ex-

ception of Mr. Caldwell who was in the vicinity for three days. It requires four weeks to obtain supplies from Foochow, there is no telegraph, and mails are very irregular, but she enjoys the isolation and is passionately fond of her work.

She has had an interesting life and one not devoid of danger. In 1895 she was wounded and barely escaped death in the Hwa Shan (Flower Mountain) massacre in which ten women and one man were brutally murdered by a mob of fanatic natives known as "Vegetarians." The Chinese Government was required to pay a considerable indemnity to Miss Hartford, which she accepted only under protest and characteristically devoted to missionary work in Kucheng where the massacre occurred.

Conditions at Yuchi when we arrived were most unsettled and for some months there had been a veritable "reign of terror." A large band of brigands was established in the hills not far from the city, and we were warned by the mandarin not to attempt to go farther up the river. A few months earlier several companies of soldiers had been sent from Foochow, and the result of turning loose these ruffians upon the town was to make "the remedy worse than the disease."

The soldiers were continually arresting innocent peasants, accusing them of being brigands or aiding the bandits, and shooting them without a hearing. At one time accurate information concerning the camp of the robbers was received and the soldiers set bravely off, but when within a short distance of the brigands the commanders began to quarrel among themselves, guns were fired, and the bandits escaped. A Chinaman must always "save his face," however, and when they returned

to Yuchi they arrested dozens of people on mere suspicion and executed them without the vestige of a trial. Finally conditions became so intolerable that no one was safe, and after repeated complaints by the missionaries, a new mandarin of a somewhat better type was sent to Yuchi.

As it was impossible to do any collecting farther up the river because of the bandits, we left for Yen-ping two days after arriving at Yuchi. Yen-ping is a wonderfully picturesque old city, situated on a hill at a fork of the river and surrounded by high stone walls pierced and loopholed for rifle fire. Such walls, while of little use against artillery, nevertheless offer a formidable obstacle to anything less than field guns as we ourselves were destined to discover.

The Methodist mission compound encloses a considerable area on the very summit of the hill, backed by the city wall, and besides the four dwelling houses, comprises two large schools for boys and girls. Mr. Caldwell's residence commands a wonderful view down the river and in the late afternoon sunlight when the hills are bathed in pink and lavender and purple a more beautiful spot can hardly be imagined.

But the delights of Yen-ping are somewhat tempered by the abominable weather. In summer the heat is almost unbearable and the air is so nearly saturated from continual rain that it is impossible to dry anything except over a fire. From all reports winter must be almost as bad in the opposite extreme for the cold is damp and penetrating; but the early fall is said to be delightful.

The larger part of Fukien, like many other provinces in China, has been denuded of forests, and the groves

of pine which remain have all been planted. This deforestation consequently has driven out the game, and except for tigers, leopards, wolves, wild pigs, serows and gorals, none of the large species is left. However, the dense growth of sword grass and the thorny bushes which clothe the hills and choke the ravines give cover to muntjac, or barking deer, and many species of small cats, civets, and other Viverines. These animals come to the rice paddys, which fill every valley, to hunt for frogs and fish, but it is difficult to catch them because of the Chinese who are continually at work in the fields.

We spent a week trapping about Yen-ping and although we caught a good many animals they were almost always stolen together with the traps. We had this same difficulty in Yün-nan as well as in Fukien. None of us had ever seen natives in any part of the world who were such unmitigated thieves as the Chinese of these two provinces. The small mammals are hardly more abundant than the larger ones for the natives wage an unceasing war on those about the rice paddys and have exterminated nearly all but a few widely distributed forms.

CHAPTER IV

A BAT CAVE IN THE BIG RAVINE

A FEW days after our arrival in Yen-ping we went with Mr. Caldwell and his son Oliver to a Taoist temple seven miles away in a lonely ravine known as Chi-yuen-kang. The walk to the temple in the early morning was delightful. The "bamboo chickens" and francolins were calling all about us and on the way we shot enough for our first day's dinner. Both these birds are abundant in Fukien Province but it is by no means easy to kill them for they live in such thick cover that they can only be flushed with difficulty.

Early in the morning we frequently heard the francolins crowing in the trees or on the top of a hill and when a cock had taken possession of such a spot the intrusion of another was almost sure to cause trouble which only ended when one of them had been driven off.

For two miles and a half the Big Ravine is a narrow cut between perpendicular rock walls thickly clothed to their very summits with bamboo and a tangle of thorny vines. In the bottom of the gorge a mountain torrent foams among huge bowlders but becomes a gentle, slow moving stream when it leaves the cool darkness of the cañon to spread itself over the terraced rice fields.

About a mile from the entrance two old temples nestle into the hillside. One stands just over the water,

but the other clings to the rock wall three hundred feet above the river, and it was there that we made our camp.

The old priest in charge did not appear especially delighted to see us until I slipped a Mexican dollar into his hand—then it was laughable to see his change of face. The far end of the balcony was given up to us while Mr. Caldwell and Oliver put up their beds at the feet of a grinning idol in the main temple.

We had come to Chi-yuen-kang to hunt serow (*see* Chapter XVII) and had brought with us only a few traps for small mammals. Harry had seen several serow exhibited for sale on market days in towns along the river, and all were reported to have been killed near this ravine. There was a village of considerable size at the upper end and here we collected a motley lot of beaters with half a dozen dogs to drive the top of a mountain which towered about two thousand five hundred feet above the river.

Never will we forget that climb! We tried to start at daylight but it was well toward six o'clock before we got our men together. A Chinaman would drive an impatient man to apoplexy and an early grave for it is well-nigh impossible to get him started within an hour of the appointed time, and with a half dozen the difficulty is multiplied as many times. Just when you think all is ready and that there can be no possible reason for delaying longer, the whole crowd will disappear suddenly and you discover that they have gone for "chow." Then you know that the end is really in sight, for chow usually is the last thing.

We waited nearly two hours on this particular morning before we started on the long climb to the top of the

mountain. The sun was simply blazing, and in fifteen minutes we were soaked with perspiration. When we were half way up the dogs disappeared in a small ravine overgrown with bamboo and sword grass and suddenly broke into a chorus of yelps. They had found a fresh trail and were driving our way.

Harry ran to a narrow opening in the jungle, shouting to us to watch another higher up. We were hardly in position when his rifle banged, followed by such a bedlam of yells and barks that we thought he must have killed nothing less than one of the hunters. Before we reached them Harry appeared, smiling all over, and dragging a muntjac (*Muntiacus*) by the fore legs. He had just made a beautiful shot, for the clearing he had been watching was not more than ten feet wide and the muntjac flashed across it at full speed. Caldwell fired while it was in mid-air and his bullet caught the animal at the base of the neck, rolling it over stone dead.

This beautiful little deer in Fukien is hardly larger than a fox. Its antlers are only two or three inches in length and rise from an elongated skin-covered pedicel instead of from the base of the skull as in all other members of the deer family. On each side of the upper jaw is a slender tusk, about two inches long, which projects well beyond the lips and makes a rather formidable weapon.

We hoped that this muntjac was going to prove a "good joss," but instead a disappointing day was in store for us. When we had worked our way to the very summit of the mountain under a merciless sun and over a trail which led through a smothering bamboo jungle, we saw dozens of fresh serow tracks. The animals were

A Chinese Hunter and a Muntjac

Brigands Killed in the Yen-ping Rebellion

there without a doubt and we were on the *qui vive* with excitement.

We selected positions and the men made a long circuit to drive toward us as Caldwell had directed. After half an hour had passed we heard them yelling as they closed in, but what was our disgust to see them solemnly parading in single file up the bottom of the valley on an open trail and carefully avoiding all thickets where a serow could possibly be. As Harry expressed it, "all the animals had to do was to sit tight and watch the noble procession pass." The beaters very evidently knew nothing whatever about driving nor were we able to teach them, for they seriously objected to leaving the open trails and going into the bush.

We worked hard for serow but the men were hopeless and it was impossible to "still hunt" the animals at that time of the year. The natives say that in September when the mushrooms are abundant in the lower forests the serow leave the mountain tops and thick cover to feed upon the fungus, and that they may be killed without the aid of beaters, but at any time the hunt would involve a vast amount of labor with only a moderate chance of success. After we had left Fukien, Mr. Caldwell purchased a fine male and female serow for us which are especially interesting as they represent a different subspecies (*Capricornis sumatrensis argyrochaetes*) from those we killed in Yün-nan.

Chi-yuen-kang did yield us results, however, for we discovered a wonderful bat cave less than a mile from our temple. Its entrance was a low round hole half covered with vegetation, and opening into a high circular gallery; from this three long corridors branched off like fingers from the palm of a giant's hand. The

cave was literally alive with bats. There must have been ten thousand and on the first day we killed a hundred, representing seven species and at least four genera. This was especially remarkable as it is unusual to find more than two or three species living together.

The cave was a regular bat apartment house for each corridor was divided by rock partitions into several small rooms in every one of which bats of different species were rearing their families. The young in most instances were only a few days old but were thickly clustered on the walls and ceilings, and each and every one was squeaking at the top of its tiny lungs. The place must have been occupied for scores, if not hundreds, of years for the floor was knee-deep with dung.

When we returned the day after our first visit we found that many of the young bats had been removed by their parents and in some instances entire rooms had been vacated. After the first day the odor of the cave was so nauseating that to enable us to go inside it was necessary to wear gauze pads of iodoform over our noses.

The bats at this place were killed with bamboo switches but later we always used a long gill net which had been especially made in New York. We could hang the net over the entrance to a cave and, when all was ready, send a native into the galleries to stir up the animals. As they flew out they became entangled in the net and could be caught or killed before they were able to get away. It was sometimes possible to catch every specimen in a cavern, and moreover, to secure them in perfect condition without broken skulls or wings.

If a bat escaped from the net it would never again

strike it, for the animals are wonderfully accurate in flight and most expert dodgers. Even while in a cave, where hundreds of bats were in the air, they seldom flew against us, although we might often be brushed by their wings; and it was a most difficult thing to hit them with a bamboo switch. Their ability in dodging is without doubt a necessary development of their feeding habits for, with the exception of a few species, bats live exclusively upon insects and catch them in the air.

It is a rather terrifying experience for a girl to sit in a bat cave especially if the light has gone out and she is in utter darkness. Of course she has a cap tightly pulled over her ears, for what girl, even if she be a naturalist's wife, would venture into a den of evil bats with one wisp of hair exposed!

All about is the swish of ghostly wings which brush her face or neck and the air is full of chattering noises like the grinding of hundreds of tiny teeth. Sometimes a soft little body plumps into her lap and if she dares to take her hands from her face long enough to disengage the clinging animal she is liable to receive a vicious bite from teeth as sharp as needles. But, withal, it is good fun, and think how quickly formalin jars or collecting trays can be filled with beautiful specimens!

CHAPTER V

THE YEN-PING REBELLION

On Sunday, June 18, we went to the bat cave to obtain a new supply of specimens. Upon our return, just as we were about to sit down to luncheon, four excited Chinese appeared with the following letter from Mr. Caldwell:

Dear Roy:

There was quite a lively time in the city at an early hour this morning. The rebels have taken Yen-ping and it looks as though there was trouble ahead. Northern soldiers have been sent for and the chances are that either tonight or tomorrow morning there will be quite a battle. Bankhardt, Dr. Trimble and myself have just made a round of the city, visiting the telegraph office, post office and other places, and while we do not believe that the foreigners will be molested, nevertheless it is impossible to tell just what to expect. It is certain, however, that the Consul will order all of us to Foochow if news of the situation reaches there. Owing to the uncertainty, I think you had better come in to Yen-ping so as to be ready for any eventuality.

After talking the situation over with Dr. Trimble and Mr. Bankhardt, we all agreed that the wisest thing is for you to come in immediately. I am sending four burden-bearers for it will be out of the question to find any tomorrow, if trouble occurs tonight. The city gates are closed so you will have to climb up the ladder over the wall behind our compound. Best wishes.

Harry.

P. S.—Later: It is again reported that Northern soldiers are to arrive tonight. If they do and trouble occurs your only chance is to get to Yen-ping today.

H. C.

The camp immediately was thrown into confusion for Da-Ming, the cook, and the burden-bearers were jabbering excitedly at the top of their voices. The servants began to pack the loads at once and meanwhile we ate a roast chicken faster than good table manners would permit—in fact, we took it in our fingers. We were both delighted at the prospect of some excitement and talked almost as fast as the Chinese.

In just one hour from the time Harry's letter had been received, we were on the way to Yen-ping. It was the hottest part of the day, and we were dripping with perspiration when we left the cool darkness of the ravine and struck across the open valley, which lay shimmering in a furnace-like heat. At the first rest house on the top of the long hill we waited nearly an hour for our bearers who were struggling under the heavy loads.

Three miles farther on a poor woman tottered past us on her peglike feet leaning on the arm of a man. A short distance more and we came to the second rest house. We had been there but a few moments when three panting women, steadying themselves with long staves and barely able to walk on feet not more than four inches long, came up the hill. With them were several men bearing household goods in large bundles and huge red boxes.

The exhausted women sank upon the benches and fanned themselves while the perspiration ran down their

flushed faces. They looked so utterly miserable that we told the cook to give them a piece of cake which Mrs. Caldwell had sent us the day before. Their gratitude was pitiful, but, of course, they gave the larger share to the men.

It was not long before other women and children appeared on the hill path, all struggling upward under heavy loads, or tottering along on tightly bound feet. Probably these women had not walked so far in their entire lives, but the fear of the Northern soldiers and what would happen in the city if they took possession had driven them from their homes.

Farther on we had a clear view across the valley where a long line of people was filing up to a temple which nestled into the hillside. Half a mile beyond were two other temples both crowded with refugees and their goods. Hundreds of families were seeking shelter in every little house beside the road and were overflowing into the cowsheds and pigpens.

At six o'clock we stood on the summit of the hill overlooking the city and half an hour later were clambering up the ladder over the high wall of the compound, just behind Dr. Trimble's house. We were wet through and while cooling off heard the story of the morning's fighting. It seemed that a certain element in the city was in coöperation with the representatives of the revolutionary organization. These men wished to obtain possession of Yen-ping and, after the rebellion was well started, to gather forces, march to Foochow, and force the Governor to declare the independence of the province.

The plot had been hatching for several days, but the death of Yuan Shi-kai had somewhat delayed its fruition. Saturday, however, it was known throughout the

city that trouble would soon begin. Sunday morning at half past three, a band of one hundred men from Yuchi had marched to Yen-ping where they were received by a delegation of rebels dressed in white who opened to them the east gate of the city. Immediately they began to fire up the streets to intimidate the people and in a short time were in a hot engagement with the seventeen Northern soldiers, some of whom threw away their guns and swam across the river. The remaining city troops were from the province of Hunan and their sympathies were really with the South in the great rebellion. These immediately joined the rebels, where they were received with open arms. It was reported that the *tao-tai* (district mandarin) had asked for troops from Foochow and that these might be expected at any moment; thus when they arrived a real battle could be expected and it was very likely that the city would be partly destroyed.

We had a picnic supper on the Caldwell's porch and discussed the situation. It was the opinion of all that the foreigners were in no immediate danger, but nevertheless it was considered wise to be prepared, and we decided upon posts for each man if it should become necessary to protect the compound.

Hundreds of people were besieging the missionaries with requests to be allowed to bring their goods and families inside the walls, but these necessarily had to be refused. Had the missionaries allowed the Chinese to bring their valuables inside it would have cost them the right of Consular protection and, moreover, their compound would have been the first to be attacked if looting began.

On Monday morning while we were sitting on the

porch of Mr. Caldwell's house preparing some bird skins, there came a sharp crackle of rifle fire and then a roar of shots. Bullets began to whistle over us and we could see puffs of smoke as the deep bang of a black powder gun punctuated the vicious snapping of the high-power rifles. The firing gradually ceased after half an hour and we decided to go down to the city to see what had happened, for, as no Northern troops had appeared, the cause of the fighting was a mystery.

We went first to the mission hospital which lay across a deep ravine and only a few yards from the quarters of the soldiers. At the door of the hospital compound lay a bloody rag, and we found Dr. Trimble in the operating room examining a wounded man who had just been brought in. The fellow had been shot in the abdomen with a 45-caliber lead ball that had gone entirely through him, emerging about three inches to the right of his spine.

From the doctor we got the first real news of the puzzling situation. It appeared that all the men who had arrived Sunday morning from Yuchi to join the Yen-ping rebels were in reality brigands and, to save their own lives, the Hunan soldiers quartered in the city had played a clever trick. They had pretended to join the rebels but at a given signal had turned upon them, killing or capturing almost every one. Although their sympathies were really with the South, the Hunan men knew that the rebels in Yen-ping could not hold the city against the Northern soldiers from Foochow and, by crushing the rebellion themselves, they hoped to avert a bigger fight.

As we could not help the doctor he suggested that we might be of some assistance to the wounded in the

city, and with rude crosses of red cloth pinned to our white shirt sleeves we left the hospital, accompanied by four Chinese attendants bearing a stretcher. In the compound we met a chair in which was lying an old man groaning loudly and dripping with blood. Beside him were his wife and several boys. The poor woman was crying quietly and, between her sobs, was offering the wounded man mustard pickles from a small dish in her hand! Poor things, they have so little to eat that they believe food will cure all ills!

The bearers set the chair down as we appeared and lifted the filthy rag which covered a gaping wound in the man's shoulder, over which had been plastered a great mass of cow dung. Just think of the infection, but it was the only remedy they knew!

We took the man upstairs where Dr. Trimble was preparing to operate on the fellow who had been shot in the abdomen. The doctor was working steadily and quietly, making every move count and inspiring his native hospital staff with his own coolness; the way this young missionary handled his cases made us glad that he was an American.

On the way down the hill several soldiers passed us, each carrying four or five rifles and slung about with cartridge belts—plunder stripped from the men who had been killed. A few hundred yards farther on we found two brigands lying dead in a narrow street. The nearest one had fallen on his face and, as we turned him over, we saw that half his head had been blown away; the other was staring upward with wide open eyes on which the flies already were settling in swarms.

There was little use in wasting time over these men who long ago had passed beyond need of our help, and

we went on rapidly down the alley to the main thoroughfare. Guided by a small boy, we hurried over the rough stones for fifteen minutes, and suddenly came to a man lying at the side of the street, his head propped on a wooden block. An umbrella once had partly covered him but had fallen away, leaving him unprotected in the broiling sun. His face and a terrible wound in his head were a solid mass of flies, and thousands of insects were crawling over the blood clots on the stones beside him. At first we thought he was dead but soon saw his abdomen move and realized that he was breathing. It did not seem possible that a human being could live under such conditions; and yet the bystanders told us that he had been lying there for thirty hours—he had been shot early the previous morning and it was now three o'clock of the next afternoon.

The man was a poor water-carrier who lived with his wife in the most utter poverty. He had been peering over the city wall when the firing began Sunday morning and was one of the first innocent bystanders to pay the penalty of his curiosity. I asked why he had not been taken to the hospital, and the answer was that his wife was too poor to hire anyone to carry him and he had no friends. So there he lay in the burning sun, gazed at by hundreds of passers-by, without one hand being lifted to help him.

Our hospital attendants brushed away the flies, placed him in the stretcher and started up the long hill, followed by the haggard, weeping wife and a curious crowd. On every hand were questions: "Why are these men taking him away?" "What are they going to do with him?" But several educated natives who understood said, *"Ing-ai-gidaiie"* (A work of love). They got right

there a lesson in Christianity which they will not soon forget. It is seldom that Chinese try to help an injured man, for ever present in their minds is the possibility that he may die and that they will be responsible for his burial expenses.

We left the stretcher bearers at the corner of the main street with orders to return as soon as they had deposited the man in the hospital and, under the guidance of a boy, hurried toward the east gate where it was said seven or eight men had been shot. Our guide took us first to a brigand who had been wounded and left to die beside the gutter. The corpse was a horrible sight and with a feeling of deathly nausea we made a hurried examination and walked to the gate at the end of the street.

A dozen soldiers were on guard. We learned from the officer that there were no wounded in the pile of dead just beyond the entrance, so we turned toward the river bank and rapidly patrolled the alleys leading to the *tao-tai's yamen* (official residence) where the firing had been heaviest. The *yamen* was crowded with soldiers, and we were informed that the dead had all been removed and that there were no wounded—a grim statement which told its own story.

The *yamen* is but a short distance from the hospital so we climbed the hill to the compound. The sun was simply blazing and I realized then what the wounded men must have suffered lying in the heat without shelter. We returned to the house and were resting on the upper porch when suddenly, far down the river, we saw the glint of rifle barrels in the sunlight, and with field glasses made out a long line of khaki-clad men winding along the shore trail. At the same time two

huge boats filled with soldiers came into view heading for the water gate of the city. These were undoubtedly the Northern troops from Foochow who were expected Monday night.

Even as we looked there came a sudden roar of musketry and a cloud of smoke drifted up from the barracks right below us—then a rattling fusillade of shots. We could see soldiers running along the walls firing at men below and often in our direction. Bullets hummed in the air like angry bees and we rushed for cover, but in a few moments the firing ceased as suddenly as it began.

We were at a loss to know what it all meant and why the troops were firing upon the Northern soldiers whom they wished to placate. It was still a mystery when we sat down to dinner at half past seven, but a few minutes later Mr. Bankhardt rushed in saying that he had just received a note from the *tao-tai.* The mandarin's personal servant had brought word that the Northern soldiers, who had just entered the city, were going to kill him and he begged the missionaries for assistance. Bankhardt also told us of the latest developments in the situation. It seems that the city soldiers supposed the Northern troops to be brigands and had fired upon them and killed several before they discovered their mistake. A very delicate situation had thus been precipitated, for the Northern commander believed that it was treachery and intended to attack the barracks in the morning and kill every man whom he found with a rifle, as well as all the city officials.

The story of the way in which the missionaries acted as peacemakers, saved the *tao-tai,* and prevented the slaughter which surely would have taken place in the

morning, is too long to be told here, for it was accomplished only after hours of the talk and "face saving" so dear to the heart of the Oriental. Suffice it to say that through the exercise of great tact and a thorough understanding of the Chinese character they were able to settle the matter without bloodshed.

The following day twenty brigands were given a so-called trial, marched off to the west gate, beheaded amid great enthusiasm, and the incident was closed. In the afternoon a messenger called and delivered to each of us an official letter from the commander of the Northern troops thanking us for the part we had played in averting trouble and bringing the matter to a peaceful end.

An interesting sidelight on the affair was received a few days later. A young man, a Christian, who was born in the same town from which a number of the brigands had come, went to his house on Monday night after the fight and found seven of the robbers concealed in his bedroom. He was terrified because if they were discovered he and all his family would be killed for aiding the bandits. He told them they must leave at once, but they pleaded with him to let them stay for they knew there were soldiers at every corner and that it would be impossible to get away.

While he was imploring them to go, a knock sounded at the door. He pushed the brigands into the courtyard, and opened to three soldiers. They said: "We understand you have brigands in your house." He was trembling with fear, but answered, "Come in and see for yourself, if you think so."

The soldiers were satisfied by his frank open manner and, as they knew him to be a good man, did not search the house, but went away. The poor fellow was

frightened nearly to death, but as his place was being watched it was impossible for the brigands to leave during the day.

At night they stripped themselves, shaved their heads, and dressed like coolies, and were able to get to the ladder down the city wall just below the mission compound where they could escape into the hills.

The day after this occurrence, about four o'clock in the afternoon, a breathless Chinese appeared at the house with a note to Mr. Bankhardt saying that his Chinese teacher and the mission school cook had been arrested by the Northern soldiers and were to be beheaded in an hour. We hurried to the police office where they were confined and found that not only the two men but three others were in custody.

The mission cook owned a small restaurant under the management of one of his relatives and, while Bankhardt's teacher and the other man were sitting at a table, some Northern soldiers appeared, one of whom owed the restaurant keeper a small amount of money. When asked to pay, the soldier turned upon him and shouted: "You have been assisting the brigands. I saw some of them carrying goods into your house." Thereupon the soldiers arrested everyone in the shop.

The police officials were quite ready to release the teacher and the other man upon our statements, but they would not allow the cook to go. His hands were kept tightly bound and he was chained to a post by the neck. The soldier who arrested him was his sole accuser, but of course, others would appear to uphold him in his charge if it were necessary.

The cook was as innocent as any one of the missionaries, but it required several hours of work and threats

of complaint to the government at Foochow to prevent the man from being summarily executed.

We were not able to get any mail from Foochow during the rebellion because the constant stream of Northern soldiers on their way up the river had paralyzed the entire country to such an extent that all the river men had fled.

The soldiers were firing for target practice upon every boat they saw on the river and dozens of men had been killed and then robbed. The Northern commander told us frankly that this could not be prevented, and when we announced that we were going to start with all the missionaries down the river on the following day, he was very much disturbed. He insisted that we have American flags displayed on our boats to prevent being fired upon by the soldiers.

Although it had taken eight days to work our way laboriously through the rapids and up the river from Foochow to Yen-ping, we covered the same distance down the river in twenty-four hours and had breakfast with Mr. Kellogg at his house the morning after we left Yen-ping. In two days our equipment was repacked and ready for the trip to Futsing to hunt the blue tiger.

CHAPTER VI

HUNTING THE "GREAT INVISIBLE"

For many years before Mr. Caldwell went to Yenping he had been stationed at the city of Futsing, about thirty miles from Foochow. Much of his work consisted of itinerant trips during which he visited the various mission stations under his charge. He almost invariably went on foot from place to place and carried with him a butterfly net and a rifle, so that to so keen a naturalist each day's walk was full of interest.

The country was infested with man-eating tigers, and very often the villagers implored him to rid their neighborhood of some one of the yellow raiders which had been killing their children, pigs, or cattle. During ten years he had killed seven tigers in the Futsing region. He often said that his gun had been just as effective in carrying Christianity to the natives as had his evangelistic work. Although Mr. Caldwell has been especially fortunate and has killed his tigers without ever really hunting them, nevertheless it is a most uncertain sport as we were destined to learn. The tiger is the "Great Invisible"—he is everywhere and nowhere, here today and gone tomorrow. A sportsman in China may get his shot the first day out or he may hunt for weeks without ever seeing a tiger even though they are all about him; and it is this very uncertainty that makes the game all the more fascinating.

The part of Fukien Province about Futsing includes

mountains of considerable height, many of which are planted with rice and support a surprising number of Chinese who are grouped in closely connected villages. While the cultivated valleys afford no cover for tiger and the mountain slopes themselves are usually more or less denuded of forest, yet the deep and narrow ravines, choked with sword grass and thorny bramble, offer an impenetrable retreat in which an animal can sleep during the day without fear of being disturbed. It is possible for a man to make his way through these lairs only by means of the paths and tunnels which have been opened by the tigers themselves.

Mr. Caldwell's usual method of hunting was to lead a goat with one or two kids to an open place where they could be fastened just outside the edge of the lair, and then to conceal himself a few feet away. The bleating of the goats would usually bring the tiger into the open where there would be an opportunity for a shot in the late afternoon.

Mr. Caldwell's first experience in hunting tigers was with a shotgun at the village of Lung-tao. His burden-bearers had not arrived with the basket containing his rifle, and as it was already late in the afternoon, he suggested to Da-Da, the Chinese boy who was his constant companion, that they make a preliminary inspection of the lair even though they carried only shotguns loaded with lead slugs about the size of buckshot.

They tethered a goat just outside the edge of the lair and the tiger responded to its bleating almost immediately. Caldwell did not see the animal until it came into the open about fifty yards away and remained in plain view for almost half an hour. The tiger seemed to suspect danger and crouched on the

terrace, now and then putting his right foot forward a short distance and drawing it slowly back again. He had approached along a small trail, but before he could reach the goat it was necessary to cross an open space a few yards in width, and to do this the animal flattened himself like a huge striped serpent. His head was extended so that the throat and chin were touching the ground, and there was absolutely no motion of the body other than the hips and shoulders as the beast slid along at an amazingly rapid rate. But at the instant the cat gained the nearest cover it made three flying leaps and landed at the foot of the terrace upon which the goat was tied.

"Just then he saw me," said Mr. Caldwell, "and slowly pushed his great black-barred face over the edge of the grass not fifteen feet away.

"I fired point-blank at his head and neck. He leaped into the air with the blood spurting over the grass, and fell into a heap, but gathered himself and slid down over the terraces. As he went I fired a second load of slugs into his hip. He turned about, slowly climbed the hill parallel with us, and stood looking back at me, his face streaming with blood.

"I was fumbling in my coat trying to find other shells, but before I could reload the gun he walked unsteadily into the lair and lay down. It was already too dark to follow and the next morning a bloody trail showed where he had gone upward into the grass. Later, in the same afternoon, he was found dead by some Chinese more than three miles away."

During his many experiences with the Futsing tigers Mr. Caldwell has learned much about their habits and

peculiarities, and some of his observations are given in the following pages.

"The tiger is by instinct a coward when confronted by his greatest enemy—man. Bold and daring as he may be when circumstances are in his favor, he will hurriedly abandon a fresh kill at the first cry of a shepherd boy attending a flock on the mountain-side and will always weigh conditions before making an attack. If things do not exactly suit him nothing will tempt him to charge into the open upon what may appear to be an isolated and defenseless goat.

"An experience I had in April, 1910, will illustrate this point. I led a goat into a ravine where a tiger which had been working havoc among the herds of the farmers was said to live. This animal only a few days previous to my hunt had attacked a herd of cows and killed three of them, but on this occasion the beast must have suspected danger and was exceedingly cautious. He advanced under cover along a trail until within one hundred feet of the goat and there stopped to make a survey of the surroundings. Peering into the valley, he saw two men at a distance of five hundred yards or more cutting grass and, after watching intently for a time, the great cat turned and bounded away into the bushes.

"On another occasion this tiger awaited an opportunity to attack a cow which a farmer was using in plowing his field. The man had unhitched his cow and squatted down in the rice paddy to eat his mid-day meal, when the tiger suddenly rushed from cover and killed the animal only a few yards behind the peasant. This shows how daring a tiger may be when he is able to strike from the rear, and when circumstances seem

to favor an attack. I have known tigers to rush at a dog or hog standing inside a Chinese house where there was the usual confusion of such a dwelling, and in almost every instance the victim was killed, although it was not always carried away.

"There is probably no creature in the wilds which shows such a combination of daring strategy and slinking cowardice as the tiger. Often courage fails him after he has secured his victim, and he releases it to dash off into the nearest wood.

"I knew of two Chinese who were deer hunting on a mountain-side when a large tiger was routed from his bed. The beast made a rushing attack on the man standing nearest to the path of his retreat, and seizing him by the leg dragged him into the ravine below. Luckily the man succeeded in grasping a small tree whereupon the tiger released his hold, leaving his victim lying upon the ground almost paralyzed with pain and fear.

"A group of men were gathering fuel on the hills near Futsing when a tiger which had been sleeping in the high grass was disturbed. The enraged beast turned upon the peasants, killing two of them instantly and striking another a ripping blow with his paw which sent him lifeless to the terrace below. The beast did not attempt to drag either of its victims into the bush or to attack the other persons near by.

"The strength and vitality of a full grown tiger are amazing. I had occasion to spend the night a short time ago in a place where a tiger had performed some remarkable feats. Just at dusk one of these marauders visited the village and discovered a cow and her six-months-old calf in a pen which had been excavated in

the side of a hill and adjoined a house. There was no possible way to enter the enclosure except by a door opening from the main part of the dwelling or to descend from above. The tiger jumped from the roof upon the neck of the heifer, killing it instantly, and the inmates of the house opened the door just in time to see the animal throw the calf out bodily and leap after it himself. I measured the embankment and found that the exact height was twelve and a half feet.

"The same tiger one noon on a foggy day attacked a hog, just back of the village and carried it into the hills. The villagers pursued the beast and overtook it within half a mile. When the hog, which dressed weighed more than two hundred pounds, was found, it had no marks or bruises upon it other than the deep fang wounds in the neck. This is another instance where courage failed a tiger after he had made off with his kill to a safe distance. The Chinese declare that when carrying such a load a tiger never attempts to drag its prey, but throws it across its back and races off at top speed.

"The finest trophy taken from Fukien Province in years I shot in May, 1910. Two days previous to my hunt this tiger had killed and eaten a sixteen-year-old boy. I happened to be in the locality and decided to make an attempt to dispose of the troublesome beast. Obtaining a mother goat with two small kids, I led them into a ravine near where the boy had been killed. The goat was tied to a tree a short distance from the lair, and the kids were concealed in the tall grass well in toward the place where the tiger would probably be. I selected a suitable spot and kneeled down behind a bank of ferns and grass. The fact that one may be

stalked by the very beast which one is hunting adds to the excitement and keeps one's nerves on edge. I expected that the tiger would approach stealthily as long as he could not see the goat, as the usual plan of attack, so far as my observation goes, is to creep up under cover as far as possible before rushing into the open. In any case the tiger would be within twenty yards of me before it could be seen.

"For more than two hours I sat perfectly still, alert and waiting, behind the little blind of ferns and grass. There was nothing to break the silence other than the incessant bleating of the goats and the unpleasant rasping call of the mountain jay. I had about given up hope of a shot when suddenly the huge head of the man-eater emerged from the bush, exactly where I had expected he would appear and within fifteen feet of the kids. The back, neck, and head of the beast were in almost the same plane as he moved noiselessly forward.

"I had implicit confidence in the killing power of the gun in my hand, and at the crack of the rifle the huge brute settled forward with hardly a quiver not ten feet from the kids upon which he was about to spring. A second shot was not necessary but was fired as a matter of precaution as the tiger had fallen behind rank grass, and the bullet passed through the shoulder blade lodging in the spine. The beast measured more than nine feet and weighed almost four hundred pounds.

"Upon hearing the shots the villagers swarmed into the ravine, each eager not so much to see their slain tormentor as to gather up the blood. But little attention was paid to the tiger until every available drop was sopped up with rags torn from their clothing, whilst men

and children even pulled up the blood-soaked grass. I learned that the blood of a tiger is used for two purposes. A bit of blood-stained cloth is tied about the neck of a child as a preventive against either measles or smallpox, and tiger flesh is eaten for the same purpose. It is also said that if a handkerchief stained with tiger blood is waved in front of an attacking dog the animal will slink away cowed and terrified.

"From the Chinese point of view the skin is not the most valuable part of a tiger. Almost always before a hunt is made, or a trap is built, the villagers burn incense before the temple god, and an agreement is made to the effect that if the enterprise be successful the skin of the beast taken becomes the property of the gods. Thus it happens that in many of the temples handsome tiger-skin robes may be found spread in the chair occupied by the noted 'Duai Uong,' or the god of the land. When a hunt is successful, the flesh and bones are considered of greatest value, and it often happens that a number of cows are killed and their flesh mixed with that of the tiger to be sold at the exorbitant price cheerfully paid for tiger meat. The bones are boiled for a number of days until a gelatine-like product results, and this is believed to be exceptionally efficacious medicine.

"Notwithstanding the danger of still-hunting a tiger in the tangle of its lair, one cannot but feel richly rewarded for the risk when one begins to sum up one's observations. The most interesting result of investigating an oft-frequented lair is concerning the animal's food. That a tiger always devours its prey upon the spot where it is taken or in the adjacent bush is an erroneous idea. This is often true when the kill is too

heavy to be carried for a long distance, but it is by no means universally so. Not long ago the remains of a young boy were found in a grave adjacent to a tiger's lair a few miles from Futsing city. No child had been reported missing in the immediate neighborhood and everything indicated that the boy had been brought alive to this spot from a considerable distance. The sides of the grave were besmeared with the blood of the unfortunate victim, indicating that the tiger had tortured it just as a cat plays with a mouse as long as it remains alive.

"In the lair of a tiger there are certain terraces, or places under overhanging trees, which are covered with bones, and are evidently spots to which the animal brings its prey to be devoured. On such a terrace one will find the remains of deer, wild hog, dog, pig, porcupine, pangolin, and other animals both domestic and wild. A fresh kill shows that with its rasp-like tongue the tiger licks off all the hair of its prey before devouring it and the hair will be found in a circle around what remains of the kill. The Chinese often raid a lair in order to gather up the quills of the porcupine and the bony scales of the pangolin which are esteemed for medicinal purposes.

"In addition to the larger animals, tigers feed upon reptiles and frogs which they find among the rice fields. On the night of April 22, 1914, a party of frog catchers were returning from a hunt when the man carrying the load of frogs was attacked by a tiger and killed. The animal made no attempt to drag the man away and it would appear that it was attracted by the croaking of the frogs.

"One often finds trees 'marked' by tigers beside some

trail or path in, or adjacent to, a lair. Catlike, the tiger measures its full length upon a tree, standing in a convenient place, and with its powerful claws rips deeply through the bark. This sign is doubly interesting to the sportsman as it not only indicates the presence of a tiger in the immediate vicinity but serves to give an accurate idea as to the size of the beast. The trails leading into a lair often are marked in a different way. In doing this the animal rakes away the grass with a forepaw and gathers it into a pile, but claw prints never appear."

CHAPTER VII

THE BLUE TIGER

After one has traveled in a Chinese *sampan* for several days the prospect of a river journey is not very alluring but we had a most agreeable surprise when we sailed out of Foochow in a chartered house boat to hunt the "blue tiger" at Futsing. In fact, we had all the luxury of a private yacht, for our boat contained a large central cabin with a table and chairs and two staterooms and was manned by a captain and crew of six men—all for $1.50 per day!

In the evening we talked of the blue tiger for a long time before we spread our beds on the roof of the boat and went to sleep under the stars. We left the boat shortly after daylight at Daing-nei for the six-mile walk to Lung-tao. To my great surprise the coolies were considerably distressed at the lightness of our loads. In this region they are paid by weight and some of the bearers carry almost incredible burdens. As an example, one of our men came into camp swinging a 125-pound trunk on each end of his pole, laughing and chatting as gayly as though he had not been carrying 250 pounds for six miles under a broiling sun.

Mr. Caldwell's Chinese hunter, Da-Da, lived at Lung-tao and we found his house to be one of several built on the outskirts of a beautiful grove of gum and banyan trees. Although it was exceptionally clean for a Chinese dwelling, we pitched our tents a short dis-

tance away. At first we were somewhat doubtful about sleeping outside, but after one night indoors we decided that any risk was preferable to spending another hour in the stifling heat of the house.

It was probable that a tiger would be so suspicious of the white tents that it would not attack us, but nevertheless during the first nights we were rather wakeful and more than once at some strange night sound seized our rifles and flashed the electric lamp into the darkness.

Tigers often come into this village. Only a few hundred yards from our camp site, in 1911, a tiger had rushed into the house of one of the peasants and attempted to steal a child that had fallen asleep at its play under the family table. All was quiet in the house when suddenly the animal dashed through the open door. The Chinese declare that the gods protected the infant, for the beast missed his prey and seizing the leg of the table against which the baby's head was resting, bolted through the door dragging the table into the courtyard.

This was the work of the famous "blue tiger" which we had come to hunt and which had on two occasions been seen by Mr. Caldwell. The first time he heard of this strange beast was in the spring of 1910. The animal was reported as having been seen at various places within an area of a few miles almost simultaneously and so mysterious were its movements that the Chinese declared it was a spirit of the devil. After several unsuccessful hunts Mr. Caldwell finally saw the tiger at close range but as he was armed with only a shotgun it would have been useless to shoot.

His second view of the beast was a few weeks later

and in the same place. I will give the story in his own words:

"I selected a spot upon a hill-top and cleared away the grass and ferns with a jack-knife for a place to tie the goat. I concealed myself in the bushes ten feet away to await the attack, but the unexpected happened and the tiger approached from the rear.

"When I first saw the beast he was moving stealthily along a little trail just across a shallow ravine. I supposed, of course, that he was trying to locate the goat which was bleating loudly, but to my horror I saw that he was creeping upon two boys who had entered the ravine to cut grass. The huge brute moved along lizard-fashion for a few yards and then cautiously lifted his head above the grass. He was within easy springing distance when I raised my rifle, but instantly I realized that if I wounded the animal the boys would certainly meet a horrible death.

"Tigers are usually afraid of the human voice so instead of firing I stepped from the bushes, yelling and waving my arms. The huge cat, crouched for a spring, drew back, wavered uncertainly for a moment, and then slowly slipped away into the grass. The boys were saved but I had lost the opportunity I had sought for over a year.

"However, I had again seen the animal about which so many strange tales had been told. The markings of the beast are strikingly beautiful. The ground color is of a delicate shade of maltese, changing into light gray-blue on the underparts. The stripes are well defined and like those of the ordinary yellow tiger."

Before I left New York Mr. Caldwell had written me repeatedly urging me to stop at Futsing on the way

to Yün-nan to try with him for the blue tiger which was still in the neighborhood. I was decidedly skeptical as to its being a distinct species, but nevertheless it was a most interesting animal and would certainly be well worth getting.

I believed then, and my opinion has since been strengthened, that it is a partially melanistic phase of the ordinary yellow tiger. Black leopards are common in India and the Malay Peninsula and as only a single individual of the blue tiger has been reported the evidence hardly warrants the assumption that it represents a distinct species.

We hunted the animal for five weeks. The brute ranged in the vicinity of two or three villages about seven miles apart, but was seen most frequently near Lung-tao. He was as elusive as a will o' the wisp, killing a dog or goat in one village and by the time we had hurried across the mountains appearing in another spot a few miles away, leaving a trail of terrified natives who flocked to our camp to recount his depredations. He was in truth the "Great Invisible" and it seemed impossible that we should not get him sooner or later, but we never did.

Once we missed him by a hair's breadth through sheer bad luck, and it was only by exercising almost superhuman restraint that we prevented ourselves from doing bodily harm to the three Chinese who ruined our hunt. Every evening for a week we had faithfully taken a goat into the "Long Ravine," for the blue tiger had been seen several times near this lair. On the eighth afternoon we were in the "blind" at three o'clock as usual. We had tied a goat to a tree nearby and her two kids were but a few feet away.

The grass-filled lair lay shimmering in the breathless heat, silent save for the echoes of the bleating goats. Crouched behind the screen of branches, for three long hours we sat in the patchwork shade,—motionless, dripping with perspiration, hardly breathing,—and watched the shadows steal slowly down the narrow ravine.

It was a wild place which seemed to have been cut out of the mountain side with two strokes of a mighty ax and was choked with a tangle of thorny vines and sword grass. Impenetrable as a wall of steel, the only entrance was by the tiger tunnels which drove their twisting way through the murderous growth far in toward its gloomy heart.

The shadows had passed over us and just reached a lone palm tree on the opposite hillside. By that I knew it was six o'clock and in half an hour another day of disappointment would be ended. Suddenly at the left and just below us there came the faintest crunching sound as a loose stone shifted under a heavy weight; then a rustling in the grass. Instantly the captive goat gave a shrill bleat of terror and tugged frantically at the rope which held it to the tree.

At the first sound Harry had breathed in my ear "Get ready, he's coming." I was half kneeling with my heavy .405 Winchester pushed forward and the hammer up. The blood drummed in my ears and my neck muscles ached with the strain but I thanked Heaven that my hands were steady.

Caldwell sat like a graven image, the stock of his little 22 caliber high power Savage nestling against his cheek. Our eyes met for an instant and I knew in that glance that the blue tiger would never make another

charge, for if I missed him, Harry wouldn't. For ten minutes we waited and my heart lost a beat when twenty feet away the grass began to move again—but rapidly and *up the ravine.*

I saw Harry watching the lair with a puzzled look which changed to one of disgust as a chorus of yells sounded across the ravine and three Chinese wood cutters appeared on the opposite slope. They were taking a short cut home, shouting to drive away the tigers —and they had succeeded only too well, for the blue tiger had slipped back to the heart of the lair from whence he had come.

He had been nearly ours and again we had lost him! I felt so badly that I could not even swear and it wasn't the fact that Harry was a missionary which kept me from it, either. Caldwell exclaimed just once, for his disappointment was even more bitter than mine; he had been hunting this same tiger off and on for six years.

It was useless for us to wait longer that evening and we pushed our way through the sword grass to the entrance of the tunnel down which the tiger had come. There in the soft earth were the great footprints where he had crouched at the entrance to take a cautious survey before charging into the open.

As we looked, Harry suddenly turned to me and said: "Roy, let's go into the lair. There is just one chance in a thousand that we may get a shot." Now I must admit that I was not very enthusiastic about that little excursion, but in we went, crawling on our hands and knees up the narrow passage. Every few feet we passed side branches from the main tunnel in any one of which the tiger might easily have been lying in wait and could have killed us as we passed. It was a foolhardy

thing to do and I am free to admit that I was scared. It was not long before Harry twisted about and said: "Roy, I haven't lost any tigers in here; let's get out." And out we came faster than we went in.

This was only one of the times when the "Great Invisible" was almost in our hands. A few days later a Chinese found the blue tiger asleep under a rice bank early in the afternoon. Frightened almost to death he ran a mile and a half to our camp only to find that we had left half an hour before for another village where the brute had killed two wild cats early in the morning.

Again, the tiger pushed open the door of a house at daybreak just as the members of the family were getting up, stole a dog from the "heaven's well," dragged it to a hillside and partly devoured it. We were in camp only a mile away and our Chinese hunters found the carcass on a narrow ledge in the sword grass high up on the mountain side. The spot was an impossible one to watch and we set a huge grizzly bear trap which had been carried with us from New York.

It seemed out of the question for any animal to return to the carcass of the dog without getting caught and yet the tiger did it. With his hind quarters on the upper terrace he dropped down, stretched his long neck across the trap, seized the dog which had been wired to a tree and pulled it away. It was evident that he was quite unconscious of the trap for his fore feet had actually been placed upon one of the jaws only two inches from the pan which would have sprung it.

One afternoon we responded to a call from Bui-tao, a village seven miles beyond Lung-tao, where the blue tiger had been seen that day. The natives assured us

that the animal continually crossed a hill, thickly clothed with pines and sword grass just above the village and even though it was late when we arrived Harry thought it wise to set the trap that night.

It was pitch dark before we reached the ridge carrying the trap, two lanterns, an electric flash-lamp and a wretched little dog for bait. We had been engaged for about fifteen minutes making a pen for the dog, and Caldwell and I were on our knees over the trap when suddenly a low rumbling growl came from the grass not twenty feet away. We jumped to our feet just as it sounded again, this time ending in a snarl. The tiger had arrived a few moments too early and we were in the rather uncomfortable position of having to return to the village by way of a narrow trail through the jungle. With our rifles ready and the electric lamp cutting a brilliant path in the darkness we walked slowly toward the edge of the sword grass hoping to see the flash of the tiger's eyes, but the beast backed off beyond the range of the light into an impenetrable tangle where we could not follow. Apparently he was frightened by the lantern, for we did not hear him again.

After nearly a month of disappointments such as these Mr. Heller joined us at Bui-tao with Mr. Kellogg. Caldwell thought it advisable to shift camp to the Ling-suik monastery, about twelve miles away, where he had once spent a summer with his family and had killed several tigers. This was within the blue tiger's range and, moreover, had the advantage of offering a better general collecting ground than Bui-tao; thus with Heller to look after the small mammals we could begin to make our time count for something if we did not get the tiger.

Ling-suik is a beautiful temple, or rather series of temples, built into a hillside at the end of a long narrow valley which swells out like a great bowl between bamboo clothed mountains, two thousand feet in height. On his former visit Mr. Caldwell had made friends with the head priest and we were allowed to establish ourselves upon the broad porch of the third and highest building. It was an ideal place for a collecting camp and would have been delightful except for the terrible heat which was rendered doubly disagreeable by the almost continual rain.

The priests who shuffled about the temples were a hard lot. Most of them were fugitives from justice and certainly looked the part, for a more disreputable, diseased and generally undesirable body of men I have never seen.

Our stay at Ling-suik was productive and the temple life interesting. We slept on the porch and each morning, about half an hour before daylight, the measured strokes of a great gong sounded from the temple just below us. *Boom—boom—boom—boom* it went, then rapidly *bang, bang, bang*. It was a religious alarm clock to rouse the world.

A little later when the upturned gables and twisted dolphins on the roof had begun to take definite shape in the gray light of the new day, the gong boomed out again, doors creaked, and from their cell-like rooms shuffled the priests to yawn and stretch themselves before the early service. The droning chorus of hoarse voices, swelling in a meaningless half-wild chant, harmonized strangely with the romantic surroundings of the temple and become our daily *matin* and evensong.

At the first gong we slipped from beneath our mos-

THE LING-SUIK MONASTERY

A PRIEST OF LING-SUIK

quito nets and dressed to be ready for the bats which fluttered into the building to hide themselves beneath the tiles and rafters. When daylight had fully come we scattered to the four winds of heaven to inspect traps, hunt barking deer, or collect birds, but gathered again at nine o'clock for breakfast and to deposit our spoil. Caldwell and I always spent the afternoon at the blue tiger's lair but the animal had suddenly shifted his operations back to Lung-tao and did not appear at Ling-suik while we were there.

Our work in Fukien taught us much that may be of help to other naturalists who contemplate a visit to this province. We satisfied ourselves that summer collecting is impracticable, for the heat is so intense and the vegetation so heavy that only meager results can be obtained for the efforts expended. Continual tramping over the mountains in the blazing sun necessarily must have its effect upon the strongest constitution, and even a man like Mr. Caldwell, who has become thoroughly acclimated, is not immune.

Both Caldwell and I lost from fifteen to twenty pounds in weight during the time we hunted the blue tiger and each of us had serious trouble from abscesses. I have never worked in a more trying climate—even that of Borneo and the Dutch East Indies where I collected in 1909-10, was much less debilitating than Fukien in the summer. The average temperature was about 95 degrees in the shade, but the humidity was so high that one felt as though one were wrapped in a wet blanket and even during a six weeks' rainless period the air was saturated with moisture from the sea-winds.

In winter the weather is raw and damp, but collecting

then would be vastly easier than in summer, not only on account of climatic conditions, but because much of the vegetation disappears and there is an opportunity for "still hunting."

Trapping for small mammal is especially difficult because of the dense population. The mud dykes and the rice fields usually are covered with tracks of civets, mungooses, and cats which come to hunt frogs or fish, but if a trap is set it either catches a Chinaman or promptly is stolen. Moreover, the small mammals are neither abundant nor varied in number of species, and the larger forms, such as tiger, leopard, wild pig and serow are exceedingly difficult to kill.

While our work in the province was done during an unfavorable season and in only two localities, yet enough was seen of the general conditions to make it certain that a thorough zoölogical study of the region would require considerable time and hard work and that the results, so far as a large collection of mammals is concerned, would not be highly satisfactory. Work in the western part of the province among the Bohea Hills undoubtedly would be more profitable, but even there it would be hardly worth while for an expedition with limited time and money.

Bird life is on a much better footing, but the ornithology of Fukien already has received considerable attention through the collections of Swinhoe, La Touche, Styan, Ricketts, Caldwell and others, and probably not a great number of species remain to be described.

Much work could still be done upon the herpetology of the region, however, and I believe that this branch of zoölogy would be well worth investigation for reptiles

and batrachians are fairly abundant and the natives would rather assist than retard one's efforts.

The language of Fukien is a greater annoyance than in any other of the Chinese coast provinces. The Foochow dialect (which is one of the most difficult to learn) is spoken only within fifty or one hundred miles of the city. At Yen-ping Mr. Caldwell, who speaks "Foochow" perfectly, could not understand a word of the "southern mandarin" which is the language of that region, and near Futsing, where a colony of natives from Amoy have settled, the dialect is unintelligible to one who knows only "Foochow."

Travel in Fukien is an unceasing trial, for transport is entirely by coolies who carry from eighty to one hundred pounds. The men are paid by distance or weight; therefore, when coolies finally have been obtained there is the inevitable wrangling over loads so that from one to two hours are consumed before the party can start.

But the worst of it is that one can never be certain when one's entire outfit will arrive at its new destination. Some men walk much faster than others, some will delay a long time for tea, or may give out altogether if the day be hot, with the result that the last load will arrive perhaps five or six hours after the first one.

As horses are not to be had, if one does not walk the only alternative is to be carried in a mountain chair, which is an uncomfortable, trapeze-like affair and only to be found along the main highways. On the whole, transport by man-power in China is so uncertain and expensive that for a large expedition it forms a grave obstacle to successful work, if time and funds be limited.

On the other hand, servants are cheap and usually

good. We employed a very fair cook who received monthly seven dollars Mexican (then about three and one-half dollars gold), and "boys" were hired at from five to seven dollars (Mexican). As none of the servants knew English they could be obtained at much lower wages, but English-speaking cooks usually receive from fifteen to twenty dollars (Mexican) a month.

It was hard to leave Fukien without the blue tiger but we had hunted him unsuccessfully for five weeks and there was other and more important work awaiting us in Yün-nan. It required thirty porters to transport our baggage from the Ling-suik monastery to Daing-nei, twenty-one miles away, where two houseboats were to meet us, and by ten o'clock in the evening we were lying off Pagoda Anchorage awaiting the flood tide to take us to Foochow. We made our beds on the deck house and in the morning opened our eyes to find the boat tied to the wharf at the Custom House on the Bund, and ourselves in full view of all Foochow had it been awake at that hour.

The week of packing and repacking that followed was made easy for us by Claude Kellogg, who acted as our ministering angel. I think there must be a special Providence that watches over wandering naturalists and directs them to such men as Kellogg, for without divine aid they could never be found. When we last saw him, he stood on the stone steps of the water front waving his hat as we slipped away on the tide, to board the S. S. *Haitan* for Hongkong.

CHAPTER VIII

THE WOMEN OF CHINA

Y. B. A.

The schools for native girls at Foochow and Yenping interested us greatly, even when we first came to China, but we could not appreciate then as we did later the epoch-making step toward civilization of these institutions.

How much the missionaries are able to accomplish from a religious standpoint is a question which we do not wish to discuss, but no one who has ever lived among them can deny that the opening of schools and the diffusing of western knowledge are potent factors in the development of the people. The Chinese were not slow even in the beginning to see the advantages of a foreign education for their boys and now, along the coast at least, some are beginning to make sacrifices for their daughters as well. The Woman's College, which was opened recently in Foochow, is one of the finest buildings of the Republic, and when one sees its bright-faced girls dressed in their quaint little pajama-like garments, it is difficult to realize that outside such schools they are still slaves in mind and body to those iron rules of Confucius which have molded the entire structure of Chinese society for over 2400 years.

The position of women in China today, and the rules which govern the household of every orthodox Chinese,

are the direct heritage of Confucianism. The following translation by Professor J. Legge from the *Narratives of the Confucian School,* chapter 26, is illuminating:

Confucius said: "Man is the representative of heaven and is supreme over all things. Woman yields obedience to the instructions of man and helps to carry out his principles. On this account she can determine nothing of herself and is subject to the rule of the three obediences.

"(1) When young she must obey her father and her elder brother;

"(2) When married, she must obey her husband;

"(3) When her husband is dead she must obey her son.

"She may not think of marrying a second time. No instructions or orders must issue from the harem. Women's business is simply the preparation and supplying of drink and food. Beyond the threshold of her apartments she shall not be known for evil or for good. She may not cross the boundaries of a state to attend a funeral. She may take no steps on her own motive and may come to no conclusion on her own deliberation."

The grounds for divorce as stated by Confucius are:

"(1) Disobedience to her husband's parents;

"(2) Not giving birth to a son;

"(3) Dissolute conduct;

"(4) Jealousy of her husband's attentions (to the other inmates of his harem);

"(5) Talkativeness, and

"(6) Thieving."

A Chinese bride owes implicit obedience to her mother-in-law, and as she is often reared by her husband's family, or else married to him as a mere child,

and is under the complete control of his mother for a considerable period of her existence, her life in many instances is one of intolerable misery. There is generally little or no consideration for a girl under the best of circumstances until she becomes the mother of a male child; her condition then improves but she approaches happiness only when she in turn occupies the enviable position of mother-in-law.

It is difficult to imagine a life of greater dreariness and vacuity than that of the average Chinese woman. Owing to her bound feet and resultant helplessness, if she is not obliged to work she rarely stirs from the narrow confinement of her courtyard, and perhaps in her entire life she may not go a mile from the house to which she was brought a bride, except for the periodical visits to her father's home.

It has been aptly said that there are no real homes in China and it is not surprising that, ignored and despised for centuries, the Chinese woman shows no ability to improve the squalor of her surroundings. She passes her life in a dark, smoke-filled dwelling with broken furniture and a mud floor, together with pigs, chickens and babies enjoying a limited sphere of action under the tables and chairs, or in the tumble-down courtyard without. Her work is actually never done and a Chinese bride, bright and attractive at twenty, will be old and faded at thirty.

But without doubt the crowning evil which attends woman's condition in China is foot binding, and nothing can be offered in extenuation of this abominable custom. It is said to have originated one thousand years before the Christian era and has persisted until the present day in spite of the efforts directed against it. The

Empress Dowager issued edicts strongly advising its discontinuation, the "Natural Foot Society," which was formed about fifteen years ago, has endeavored to educate public opinion, and the missionaries refuse to admit girls so mutilated to their schools; but nevertheless the reform has made little progress beyond the coast cities. "Precedent" and the fear of not obtaining suitable husbands for their daughters are responsible for the continuation of the evil, and it is estimated that there are still about seventy-four millions of girls and women who are crippled in this way.

The feet are bandaged between the ages of five and seven. The toes are bent under the sole of the foot and after two or three years the heel and instep are so forced together that a dollar can be placed in the cleft; gradually also the lower limbs shrink away until only the bones remain.

The suffering of the children is intense. We often passed through streets full of laughing boys and tiny girls where others, a few years older, were sitting on the doorsteps or curbstones holding their tortured feet and crying bitterly. In some instances out-houses are constructed a considerable distance from the family dwelling where the girls must sleep during their first crippled years in order that their moans may not disturb the other members of the family. The child's only relief is to hang her feet over the edge of the bed in order to stop the circulation and induce numbness, or to seek oblivion from opium.

If the custom were a fad which affected only the wealthy classes it would be reprehensible enough, but it curses rich and poor alike, and almost every day we saw heavily laden coolie women steadying themselves

A Chinese Mother with Her Children

Chinese Women of the Coolie Class with Bound Feet

by means of a staff, hobbling stiff-kneed along the roads or laboring in the fields.

Although the agitation against foot binding is undoubtedly making itself felt to a certain extent in the coast provinces, in Yün-nan the horrible practice continues unabated. During the year in which we traveled through a large part of the province, wherever there were Chinese we saw bound feet. And the fact that virtually *every* girl over eight years old was mutilated in this way is satisfactory evidence that reform ideas have not penetrated to this remote part of the Republic.

I know of nothing which so rouses one's indignation because of its senselessness and brutality, and China can never hope to take her place among civilized nations until she has abandoned this barbarous custom and liberated her women from their infamous subjection.

There has been much criticism of foreign education because the girls who have had its advantages absorb western ideas so completely that they dislike to return to their homes where the ordinary conditions of a Chinese household exist. Nevertheless, if the women of China are ever to be emancipated it must come through their own education as well as that of the men.

One of the first results of foreign influence is to delay marriage, and in some instances the early betrothal with its attendant miseries. The evil which results from this custom can hardly be overestimated. It happens not infrequently that two children are betrothed in infancy, the respective families being in like circumstances at the time. The opportunity perhaps is offered to the girl to attend school and she may even go through college, but an inexorable custom brings her back to her parents' home, forces her to submit to the engagement made in

babyhood and perhaps ruins her life through marriage with a man of no higher social status or intelligence than a coolie.

Among the few girls imbued with western civilization a spirit of revolt is slowly growing, and while it is impossible for them to break down the barriers of ages, yet in many instances they waive aside what would seem an unsurmountable precedent and insist upon having some voice in the choosing of their husbands.

While in Yen-ping we were invited to attend the semi-foreign wedding of a girl who had been brought up in the Woman's School and who was qualified to be a "Bible Woman" or native Christian teacher. It was whispered that she had actually met her betrothed on several occasions, but on their wedding day no trace of recognition was visible, and the marriage was performed with all the punctilious Chinese observances compatible with a Christian ceremony.

Precedent required of this little bride, although she might have been radiantly happy at heart, and undoubtedly was, to appear tearful and shrinking and as she was escorted up the aisle by her bridesmaid one might have thought she was being led to slaughter. White is not becoming to the Chinese and besides it is a sign of mourning, so she had chosen pink for her wedding gown and had a brilliant pink veil over her carefully oiled hair.

After the ceremony the bride and bridegroom proceeded downstairs to the joyous strain of the wedding march, but with nothing joyous in their demeanor—in fact they appeared like two wooden images at the reception and endured for over an hour the stares and loud criticism of the guests. He assumed during the ordeal a look of bored indifference while the little bride sat with

her head bowed on her breast, apparently terror stricken. But once she raised her face and I saw a merry twinkle in her shining black eyes that made me realize that perhaps it wasn't all quite so frightful as she would have us believe. I often wonder what sort of a life she is leading in her far away Chinese courtyard.

CHAPTER IX

VOYAGING TO YÜN-NAN

We had a busy week in Hongkong outfitting for our trip to Yün-nan. Hongkong is one of the best cities in the Orient in which to purchase supplies of almost any kind, for not only is the selection excellent, but the best English goods can be had for prices very little in excess of those in London itself.

The system which we used in our commissary was that of the unit food box which has been adopted by most large expeditions. The boxes were packed to weigh seventy pounds each and contained all the necessary staple supplies for three persons for one week; thus only one box needed to be opened at a time, and, moreover, if the party separated for a few days a single box could be taken without the necessity of repacking and with the assurance that sufficient food would be available.

Our supplies consisted largely of flour, butter, sugar, coffee, milk, bacon, and marmalade, and but little tinned meat, vegetables, or fruit because we were certain to be able to obtain a plentiful supply of such food in the country through which we were expecting to travel.

Our tents were brought from New York and were made of light Egyptian cotton thoroughly waterproof, but we also purchased in Hongkong a large army tent for the servants and two canvas flies to protect loads and specimens. We used sleeping bags and folding cots, tables and chairs, for when an expedition expects to re-

main in the field for a long time it is absolutely necessary to be as comfortable as possible and to live well; otherwise one cannot work at one's highest efficiency.

For clothing we all wore khaki or "Dux-back" suits with flannel shirts and high leather shoes for mountain climbing, and we had light rubber automobile shirts and rubber caps for use in rainy weather. The auto shirt is a long, loose robe which slips over the head and fastens about the neck and, when one is sitting upon a horse, can be so spread about as to cover all exposed parts of the body; it is especially useful and necessary, and hip rubber boots are also very comfortable during the rainy season.

Our traps for catching small mammals were brought from New York. We had two sizes of wooden "Out of Sight" for mice and rats, and four or five sizes of Oneida steel traps for catching medium sized animals such as civets and polecats. We also carried a half dozen No. 5 wolf traps. Mr. Heller had used this size in Africa and found that they were large enough even to hold lions.

Mr. Heller carried a 250-300 Savage rifle, while I used a 6½ mm. Mannlicher and a .405 Winchester. All of these guns were eminently satisfactory, but the choice of a rifle is a very personal matter and every sportsman has his favorite weapon. We found, however, that a flat trajectory high-power rifle such as those with which we were armed was absolutely essential for many of our shots were at long range and we frequently killed gorals at three hundred yards or over.

The camera equipment consisted of two 3A Kodaks, a Graphic 4 x 5 tripod camera, and Graflex 4 x 5 for rapid work. We have found after considerable field ex-

perience that the 4 x 5 is the most convenient size to handle, for the plate is large enough and can be obtained more readily than any other in different parts of the world. The same applies to the 3A Kodak "post-card" size film, for there are few places where foreign goods are carried that 3A films cannot be purchased.

All of our plates and films were sealed in air-tight tin boxes before we left America, and thus the material was in perfect condition when the cans were opened. We used plates almost altogether in the finer photographic work, for although they are heavier and more difficult to handle than films, nevertheless the results obtained are very superior. A collapsible rubber dark room about seven feet high and four feet in diameter was an indispensable part of the camera equipment. This tent was made for us by the Abercrombie & Fitch Company, of New York, and could be hung from the limb of a tree or the rafters of a building and be ready for use in five minutes.

The motion pictures were taken with a Universal camera, and like all other negatives were developed in the field by means of a special apparatus which had been designed by Mr. Carl Akeley of the American Museum of Natural History. This work required a much larger space than that of the portable dark room and we consequently had a tent made of red cloth which could be tied inside of our ordinary sleeping tent.

Our equipment was packed in fiber army trunks and in wooden boxes with sliding tops. The latter arrangement is especially desirable in Yün-nan, for the loads can be opened without being untied from the saddle, thus saving a considerable amount of time and trouble.

It was by no means an easy matter to get our supplies

together, but the Lane & Crawford Company of Hongkong pushed the making and packing of our boxes in a remarkably efficient manner; as the manager of one of their departments expressed it, "the one way to hurry a Chinaman is to get more Chinamen," and they put a small army at work upon our material, which was ready for shipment in just a week.

While in Hongkong we were joined by Wu Hung-tao, of Shanghai, who acted as interpreter and "head boy" as well as a general field manager of the expedition. He formerly had been in the employ of Mr. F. W. Cary, when the latter was Commissioner of Customs in Teng-yueh, Yün-nan, and he was educated at the Anglo-Chinese College of Foochow. Wu proved to be the most efficient and trustworthy servant whom we have ever employed, and the success of our work was due in no small degree to his efforts.

We left for Tonking on the S. S. *Sung-kiang,* commanded by Harry Trowbridge, a congenial and well-read gentleman whose delightful personality contributed much toward making our week's stay on his ship most pleasant. On our way to Haiphong the vessel stopped at the island of Hainan and anchored about three miles off the town of Hoi-hau. This island is 90 by 150 miles long, is mountainous in its center, but flat and uninteresting at the northwest.

A large part of the island is unexplored and in the interior there is a mountain called "the Five Fingers" which has never been ascended, for it is reported that the hill tribes are unfriendly and that the tropical valleys are reeking with deadly malaria. The island undoubtedly would prove to be a rich field for zoölogical work as is shown by the collections which the American Museum

of Natural History has already received from a native dealer; these include monkeys, squirrels, and other small mammals, and bears, leopards, and deer are said to be among its fauna.

The next night's steaming brought us to the city of Paik-hoi on the mainland. In the afternoon we went ashore with Captain Trowbridge to visit Dr. Bradley of the China Inland Mission who is in charge of a leper hospital, which is a model of its kind. The doctor was away but we made ourselves at home and when he returned he found us in his drawing room comfortably enjoying afternoon tea. He remarked that he knew of a Chinese cook who was looking for a position, and half an hour later, while we were watching some remarkably fine tennis, the cook arrived. He was about six feet two inches high, and so thin that he was immediately christened the "Woolworth Building" and, although not a very prepossessing looking individual he was forthwith engaged, principally because of his ability to speak English. This was at six o'clock in the afternoon and we had to be aboard the ship at eight. The doctor sent a note to the French Consul and the cook returned anon with his baggage and passport. Obtaining this cook was the only really rapid thing which I have ever seen done in China!

When the *Sung-kiang* arrived in Haiphong the next afternoon we were besieged by a screaming, fighting mob of Annamits who seized upon our baggage like so many vultures, and it was only by means of a few well-directed kicks that we could prevent it from being scattered to the four winds of Heaven. After we had designated a *sampan* to receive our equipment the unloading began and several trunks had gone over the side, when Mr.

Heller happened to glance down just in time to see one of the ammunition boxes drop into the water and sink like lead. The Annamits, believing that it had not been noticed, went on as blithely as before and volubly denied that anything had been lost. We stopped the unloading instantly and sent for divers. The box had sunk in thirty feet of muddy water and it seemed useless to hope that it could ever be recovered, but the divers went to work by dropping a heavy stone on the end of a rope and going down it hand over hand.

After two hours the box was located and brought dripping to the surface. Fortunately but little of the ammunition was ruined, and most of it was dried during the night in the engine room. Because of this delay we had to leave Haiphong on the following day, and with Captain Trowbridge, we went by train to Hanoi, the capital of the colony.

Hanoi is a city of delightful surprises. It has broad, clean streets, overhung with trees which often form a cool green canopy overhead, beautiful lawns and well-kept houses, and in the center of the town is a lovely lake surrounded by a wide border of palms. At the far end, like a jewel in a crystal setting, seems to float a white pagoda, an outpost of the temple which stands in the midst of a watery meadow of lotos plants. The city shops are excellent, but in most instances the prices are exceedingly high.

Like all the French towns in the Orient the hours for work are rather confusing to the foreigner. The shops open at 6:30 in the morning and close at 11 o'clock to reopen again at 3 in the afternoon and continue business until 7:30 or 8 o'clock in the evening. During the middle of the day all houses have the shutters closely drawn,

and because of the intense heat and glare of the sun the streets are absolutely deserted, not even a native being visible. In the morning a *petit déjeuner,* remarkable especially for its "petitness," is served, and a real *déjeuner* comes later anywhere from 10 to 12:30.

About 6 o'clock in the evening the open *cafés* and restaurants along the sidewalk are lined with groups of men and women playing cards and dice and drinking gin and bitters, vermouth or absinthe. There is an air of happiness and life about Hanoi which is typically Parisian and even during war time it is a city of gayety. An immense theater stands in the center of the town, but has not been opened since the beginning of the war.

We had letters to M. Chemein Dupontés, the director of the railroads, as well as to the Lieutenant-Governor and other officials. Without exception we were received in the most cordial manner and every facility and convenience put at our disposal. M. Dupontés was especially helpful.

Some time before our arrival a tunnel on the railroad from Hanoi to Yün-nan Fu had caved in and for almost a month trains had not been running. It was now in operation, however, but all luggage had to be transferred by hand at the broken tunnel and consequently must not exceed eighty-five pounds in weight. This meant repacking our entire equipment and three days of hard work. M. Dupontés arranged to have our 4000 pounds of baggage put in a special third class carriage with our "boys" in attendance and in this way saved the expedition a considerable amount of money. He personally went with us to the station to arrange for our comfort with the *chef de gare,* telegraphed ahead at every station

upon the railroad, and gave us an open letter to all officials; in fact there was nothing which he left undone.

The railroad is a remarkable engineering achievement for it was constructed in great haste through a difficult mountainous range. Yün-nan is an exceedingly rich province and the French were quick to see the advantages of drawing its vast trade to their own seaports. The British were already making surveys to construct a railroad from Bhamo on the headwaters of the Irawadi River across Yün-nan to connect with the Yangtze, and the French were anxious to have their road in operation some time before the rival line could be completed.

Owing to its hasty construction and the heavy rainfall, or perhaps to both, the tunnels and bridges frequently cave in or are washed away and the railroad is chiefly remarkable for the number of days in the year in which it does not operate; nevertheless the French deserve great credit for their enterprise in extending their line to Yün-nan Fu over the mountains where there is a tunnel or bridge almost every mile of the way. While it was being built through the fever-stricken jungles of Tonking the coolies died like flies, and it was necessary to suspend all work during the summer months.

The scenery along the railroad is marvelous and the traveling is by no means uncomfortable, but the hotels in which one stops at night are wretched. One of our friends in Hongkong related an amusing experience which he had at Lao-kay, the first hotel on the railroad. He asked for a bath and discovered that a tub of hot water had been prepared. He wished a cold bath, and seeing a large tank filled with cold water in the corner of the room he climbed in and was enjoying himself when the hotel proprietor suddenly rushed upstairs exclaim-

ing, "Mon Dieu, Mon Dieu, you are in the tank of drinking water."

When we arrived at Yün-nan Fu we found a surprisingly cosmopolitan community housed within its grim old walls; some were consuls, some missionaries, some salt, telegraph, or customs officials in the Chinese employ, and others represented business firms in Hongkong, but all received us with open-handed hospitality characteristic of the East.

We thought that after leaving Hongkong our evening clothes would not again be used, but they were requisitioned every night for we were guests at dinners given by almost everyone of the foreign community. Mr. Howard Page, a representative of the Standard Oil Company, proved a most valuable friend, and through him we were able to obtain a caravan and make other arrangements for the transportation of our baggage. M. Henry Wilden, the French Consul, an ardent sportsman and a charming gentleman, took an active interest in our affairs and arranged a meeting for us with the Chinese Commissioner of Foreign Affairs. Moreover, he later transported our trunks to Hongkong with his personal baggage and assisted us in every possible way.

We went to the Foreign Office at half past ten and were ushered into a large room where a rather imposing lunch had already been spread. The Commissioner, a fat, jolly little man, who knew a few words of French but none of English, received us in the most cordial way and immediately opened several bottles of champagne in our honor. He asked why our passports had not been viséd in Peking, and we pleased him greatly by replying that at the time we were in the capital Yün-nan was an independent province and consequently the Peking Gov-

ernment had not the temerity to put their stamp upon our passports.

Inasmuch as Yün-nan was infested with brigands we had expected some opposition to our plans for traveling in the interior, but none was forthcoming, and with the exception of an offer of a guard of soldiers for our trip to Ta-li Fu which we knew it would be impolitic to refuse, we left the Foreign Office with all the desired permits.

The Chinese Government appeared to be greatly interested in our zoölogical study of Yün-nan, offered to assist us in every way we could suggest, and telegraphed to every mandarin in the north and west of the province, instructing them to receive us with all honor and to facilitate our work in every way. None of the opposition which we had been led to expect developed, and it is difficult to see how we could have been more cordially received.

CHAPTER X

ON THE ROAD TO TA-LI FU

On August 6, we dispatched half our equipment to Ta-li Fu, and three days later we ourselves left Yün-nan Fu at eleven o'clock in the morning after an interminable wait for our caravan. Through the kindness of Mr. Page, a house boat was put at our disposal and we sailed across the upper end of the beautiful lake which lies just outside the city, and intercepted the caravan twenty-five *li*[1] from Yün-nan Fu.

On the way we passed a number of cormorant fishers, each with ten or a dozen birds sitting quietly upon the boat with outspread wings drying their feathers. Every bird has a ring about its neck, and is thus prevented from swallowing the fish which it catches by diving into the water.

After waiting an hour for our caravan we saw the long train of mules and horses winding up the hill toward us. There were seventeen altogether, and in the midst of them rode the cook clinging desperately with both hands to a diminutive mule, his long legs dangling and a look of utter wretchedness upon his face. Just before the caravan reached us it began to rain, and the cook laboriously pulled on a suit of yellow oilskins which we had purchased for him in Yün-nan Fu. These, together with a huge yellow hat, com-

[1] A *li* in this province equals one-third of an English mile.

Cormorant Fishers on the Lake at Yün-nan Fu

Our Camp at Chou Chou on the Way to Ta-li Fu

pleted a picture which made us roar with laughter; Heller gave the caption for it when he shouted, "Here comes the 'Yellow Peril.'"

We surveyed the tiny horses with dismay. As Heller vainly tried to get his girth tight enough to keep the saddle from sliding over the animal's tail he exclaimed, "Is this a horse or a squirrel I'm trying to ride?" But it was not so bad when we finally climbed aboard and found that we did not crush the little brutes.

A seventy-pound box on each side of the saddle with a few odds and ends on top made a pack of at least one hundred and sixty pounds. This is heavy even for a large animal and for these tiny mules seemed an impossibility, but it is the usual weight, and the business-like way in which they moved off showed that they were not overloaded.

The Yün-nan pack saddle is a remarkably ingenious arrangement. The load is strapped with a rawhide to a double A-shaped frame which fits loosely over a second saddle on the animal's back and is held in place by its own weight. If a mule falls the pack comes off and, moreover, it can be easily removed if the road is bad or whenever a stop is made. It has the great disadvantage, however, of giving the horses serious back sores which receive but scanty attention from the *mafus* (muleteers).

When we were fairly started upon our long ride to Ta-li Fu the time slipped by in a succession of delightful days. Since this was the main caravan route the *mafus* had regular stages beyond which they would not go. If we did not stop for luncheon the march could be ended early in the afternoon and we could settle ourselves for the night in a temple which always proved

a veritable "haven of rest" after a long day in the saddle. A few pages from my wife's "Journal" of September fifteenth describes our camp at Lu-ho-we and our life on the road to Ta-li Fu.

We are sitting on the porch of an old, old temple. It is on a hilltop in a forest grove with the gray-walled town lying at our feet. The sun is flooding the flower-filled courtyard and throwing bars of golden light through the twisted branches of a bent old pine, over the stone well, and into the dim recesses behind the altar where a benevolent idol grins down upon us.

We have been in the saddle for eight hours and it is enchanting to rest in this peaceful, aged temple. Outside children are shouting and laughing but all is quiet here save for the drip of water in the well, and the chatter of a magpie on the pine tree. Today we made the stage in one long march and now we can rest and browse among our books or wander with a gun along the cool, tree-shaded paths.

The sun is hot at midday, although the mornings and evenings are cold, and tonight we shall build a fragrant fire of yellow pine, and talk for an hour before we go to sleep upon the porch where we can see the moon come up and the stars shining so low that they seem like tiny lanterns in the sky.

It is seven days since we left Yün-nan Fu and each night we have come to temples such as this. There is an inexpressible charm about them, lying asleep, as it were, among the trees of their courtyards, with stately, pillared porches, and picturesque gables upturned to the sky. They seem so very, very old and filled with such great calm and peace.

Sometimes they stand in the midst of a populous town and we ride through long streets between dirty houses, swarming with ragged women, filthy men, and screaming children; suddenly we come to the dilapidated entrance of our temple, pass through a courtyard, close the huge gates and are in another world.

We leave early every morning and the boys are up long before dawn. As we sleepily open our eyes we see their dark figures silhouetted against the brilliant camp fire, hear the yawns of the *mafus* and the contented crunching of the mules as they chew their beans.

Wu appears with a lantern and calls out the hour and before we have fully dressed the odor of coffee has found its way to the remotest corner of the temple, and a breakfast of pancakes, eggs, and oatmeal is awaiting on the folding table spread with a clean white cloth. While we are eating, the beds are packed, and the loads retied, accompanied by a running fire of exhortations to the *mafus* who cause us endless trouble.

They are a hard lot, these *mafus*. Force seems to be the only thing they understand and kindness produces no results. If the march is long and we stop for tiffin it is well-nigh impossible to get them started within three hours without the aid of threats. Once after a long halt when all seemed ready, we rode ahead only to wait by the roadside for hours before the caravan arrived. As soon as we were out of sight they had begun to shoe their mules and that night we did not make our stage until long after dark.

In the morning when we see the first loads actually on the horses we ride off at the head of the caravan followed by a straggling line of mules and horses picking their way over the jagged stones of the road. It is delightful in the early morning for the air is fresh and brisk like that of October at home, but later in the day when the sun is higher it is uncomfortably hot, and we are glad to find a bit of shade where we can rest until the caravan arrives.

The roads are execrable. The Chinese have a proverb which says: "A road is good for ten years and bad for ten thousand," and this applies most excellently to those of Yün-nan. The main caravan highways are paved with huge stones to make them passable during the rainy season, but after a few

years' wear the blocks become broken and irregular, the earth is washed from between them and they are upturned at impossible angles. The result is a chaotic mass which by no stretch of imagination can be called a road. Where the stones are still in place they have been worn to such glasslike smoothness by the thousands of passing mules that it is well-nigh impossible to walk upon them. As a result a caravan avoids the paving whenever it can find a path and sometimes dozens of deeply-cut trails wind over the hills beside the road.

We are seldom on level ground, for ten per cent of the entire province is mountainous and we soon lost count of the ranges which we crossed. It is slow, hard work, toiling up the steep mountain-sides, but once on the ridges where the country is spread out below us like a great, green relief map, there is a wonderful exhilaration, and we climb higher with a joyous sense of freedom.

Yün-nan means "south of the cloud" and every morning the peaks about us are shrouded in fog. Sometimes the veil-like mists still float about the mountain tops when we climb into them, and we are suddenly enveloped in a wet gray blanket which sends us shivering into the coats tied to our saddles.

For centuries this road has been one of the main trade arteries through the province, and with the total lack of conservation ideas so characteristic of the Chinese, every available bit of natural forest has been cut away. As a result the mountains are desert wastes of sandstone alternating with grass-covered hills sometimes clothed with groves of pines or spruces. These trees have all been planted, and ere they have reached a height of fifteen or twenty feet will yield to the insistent demand for wood which is ever present with the Chinese.

The ignorance of the need of forest conservation is an illuminating commentary on Chinese educa-

tion. Mr. William Hanna, a missionary of Ta-li Fu, told us that one day he was riding over this same road with a Chinese gentleman, a deep scholar, who was considered one of the best educated men of the province. Pointing to the barren hills washed clean of soil and deeply worn by countless floods, Mr. Hanna remarked that all this could have been prevented, and that instead of a rocky waste there might have been a fertile hillside, had the trees been left to grow.

The Chinese scholar listened in amazement to facts which every western schoolboy has learned ere he is twelve years old, but of which he was ignorant because they are not a part of Confucius' teachings. To study modern science is considered a waste of time by the orthodox Chinese for "everything good must be old," and all his life he delves into the past utterly neglectful of the present.

Every valley along the road was green with rice fields and this, together with the deforestation of the mountains, is responsible for the almost total lack of animal life. Night after night we set traps about our temple camps only to find them untouched in the morning. There were no mammals with the exception of a few red-bellied squirrels (*Callosciurus erythræus* sub sp.) and now and then a tree shrew (*Tupaia belangeri chinensis*).

The latter is an interesting species. Although it is an Insectivore, and a relative of the tiny shrews which live in holes and under logs, it has squirrel-like habits and in appearance is like a squirrel to which it is totally unrelated. Instead of the thinly haired mouselike tails of the ordinary shrews the tupaias have developed long bushy tails and in fact look and act so much like

squirrels that it is difficult to convince the white residents of Yün-nan, who are accustomed to see them run about the hedges and walls of their courtyards that the two are quite unrelated.

The tree shrews are found only in Asia and are one of the most remarkable instances of a superficial resemblance between unrelated animals with similar habits. A study of their anatomy has revealed the fact that they represent a distinct group which is connected with the monkeys (lemurs).

Although birds were fairly abundant the species were not varied. We were about a month too early for the ducks and geese, which during the winter swarm into Yün-nan from the north, and without a dog, pheasants are difficult to get. In fact we were greatly disappointed in the game birds, for we had expected good pheasant shooting even along the road and virtually none were to be found.

The main caravan roads of Yün-nan held little of interest for us as naturalists, but as students of native customs they were fascinating, for the life of the province passed before us in panoramic completeness. Chinese villages wherever we have seen them are marvels of utter and abandoned filth and although those of Yün-nan are no exception to the rule, they are considerably better than the coast cities.

Pigs, chickens, horses and cows live in happy communion with the human inmates of the houses, the pigs especially being treated as we favor dogs at home. On the door steps children play with the swine, patting and pounding them, and one of my friends said that he had actually seen a mother bring her baby to be nursed by a sow with her family of piglets.

The natives were pleasant and friendly and seemed to be industrious. Wherever the deforestation had left sufficient soil on the lower hillsides patches of corn took the place of the former poppy fields for opium. In 1906, the Empress Dowager issued an edict prohibiting the growing of opium, and gave guarantees to the British that it would be entirely stamped out during the next ten years. Strangely enough these promises have been faithfully kept, and in Yün-nan the hillsides, which were once white with poppy blossoms, are now yellow with corn. In all our 2000 miles of riding over unfrequented trails and in the most out-of-the-way spots we found only one instance where opium was being cultivated.

The mandarin of each district accompanied by a guard of soldiers makes periodical excursions during the seasons when the poppy is in blossom, cuts down the plants if any are found, and punishes the owners. China deserves the greatest credit for so successfully dealing with a question which affects such a large part of her four hundred millions of people and which presents such unusual difficulties because of its economic importance.

Just across the frontier in Burma, opium is grown freely and much is smuggled into Yün-nan. Therefore its use has by no means been abandoned, especially in the south of the province, and in some towns it is smoked openly in the tea houses. In August, 1916, just before we reached Yün-nan Fu there was an *exposé* of opium smuggling which throws an illuminating side light on the corruption of some Chinese officials.

Opium can be purchased in Yün-nan Fu for two dollars (Mexican) an ounce, while in Shanghai it is

worth ten dollars (Mexican). Tang (the Military Governor), the Minister of Justice, the Governor's brother and three members of Parliament had collected six hundred pounds of opium which they undertook to transfer to Shanghai.

Their request that no examination of their baggage be made by the French during their passage through Tonking was granted, and a similar favor was procured for them at Shanghai. Thus the sixty cases were safely landed, but a few hours later, through the opium combine, foreign detectives learned of the smuggling and the boxes were seized.

The Minister of Justice denied all knowledge of the opium, as did the three Parliament members, and Governor Tang was not interrogated as that would be quite contrary to the laws of Chinese etiquette; however, he will not receive reappointment when his official term expires.

As we neared Ta-li Fu, and indeed along the entire road, we were amazed at the prevalence of goitre. At a conservative estimate two out of every five persons were suffering from the disease, some having two, or even three, globules of uneven size hanging from their throats. In one village six out of seven adults were affected, but apparently children under twelve or fourteen years are free from it as we saw no evidences in either sex. Probably the disease is in a large measure due to the drinking water, for it is most prevalent in the limestone regions and seems to be somewhat localized.

Every day we passed "chairs," or as we named them, "mountain schooners," in each of which a fat Chinaman sprawled while two or four sweating coolies bore him up hill. The chair is rigged between a pair of long bamboo

poles and consists of two sticks swung by ropes on which is piled a heap of bedding. Overhead a light bamboo frame supports a piece of yellow oilcloth, which completely shuts in the occupant, except from the front and rear.

The Chinese consider it undignified to walk, or even to ride, and if one is about to make an official visit nothing less than a four-man chair is required. Haste is just as much tabooed in the "front families" as physical exertion, and is utterly incomprehensible to the Chinese. Major Davies says that while he was in Tonking before the railroad to Yün-nan Fu had been constructed, M. Doumer, the Governor-General of French Indo-China, who was a very energetic man, rode to Yün-nan Fu in an extraordinarily short time. While the Europeans greatly admired his feat, the Chinese believed he must be in some difficulty from which only the immediate assistance of the Viceroy of Yün-nan could extricate him.

In Yün-nan it is necessary to carry one's own bedding for the inns supply nothing but food, and consequently when a Chinaman rides from one city to another he piles a great heap of blankets on his horse's back and climbs on top with his legs astride the animal's neck in front. The horses are trained to a rapid trot instead of a gallop, and I know of no more ridiculous sight than a Chinaman bouncing along a road on the summit of a veritable mountain of bedding with his arms waving and streamers flying in every direction. He is assisted in keeping his balance by broad brass stirrups in which he usually hooks his heels and guides his horse by means of a rawhide bridle decorated with dozens of bangles which make a comforting jingle whenever he moves.

On the sixth day out when approaching the city of

Chu-hsuing Fu we took a short cut through the fields leaving the caravan to follow the main road. The trail brought us to a river about forty feet wide spanned by a bridge made from two narrow planks, with a wide nedian fissure. We led our horses across without trouble and Heller started to follow. He had reached the center of the bridge when his horse shied at the hole, jumped to one side, hung suspended on his belly for a moment, and toppled off into the water.

The performance had all happened behind Heller's back and when he turned about in time to see his horse diving into the river, he stood looking down at him with a most ludicrous expression of surprise and disgust, while the animal climbed out and began to graze as quietly as though nothing had happened.

Chu-hsuing was interesting as being the home of Miss Cordelia Morgan, a niece of Senator Morgan of Virginia. We found her to be a most charming and determined young woman who had established a mission station in the city under considerable difficulties. The mandarin and other officials by no means wished to have a foreign lady, alone and unattended, settle down among them and become a responsibility which might cause them endless trouble, and although she had rented a house before she arrived, the owner refused to allow her to move in.

She could get no assistance from the mandarin and was forced to live for two months in a dirty Chinese inn, swarming with vermin, until they realized that she was determined not to be driven away. She eventually obtained a house and while she considers herself comfortable, I doubt if others would care to share her life un-

less they had an equal amount of determination and enthusiasm.

At that time she had not placed her work under the charge of a mission board and was carrying it on independently. Until our arrival she had seen but one white person in a year and a half, was living entirely upon Chinese food, and had tasted no butter or milk in months.

We had a delightful dinner with Miss Morgan and the next morning as our caravan wound down the long hill past her house she stood at the window to wave good-by. She kept her head behind the curtains, and doubtless if we could have seen her face we would have found tears upon it, for the evening with another woman of her kind had brought to her a breath of the old life which she had resolutely forsaken and which so seldom penetrated to her self-appointed exile.

On our ninth day from Yün-nan Fu we had a welcome bit of excitement. We were climbing a long mountain trail to a pass over eight thousand feet high and were near the summit when a boy dashed breathlessly up to the caravan, jabbering wildly in Chinese. It required fifteen minutes of questioning before we finally learned that bandits had attacked a big caravan less than a mile ahead of us and were even then ransacking the loads.

He said that there were two hundred and fifty of them and that they had killed two *mafus;* almost immediately a second gesticulating Chinaman appeared and gave the number as three hundred and fifty and the dead as five. Allowing for the universal habit of exaggeration we felt quite sure that there were not more than fifty, and subsequently learned that forty was the correct number and that no one had been killed.

Our caravan was in a bad place to resist an attack but

we got out our rifles and made for a village at the top of the pass. There were not more than a half dozen mud houses and in the narrow street between them perfect bedlam reigned. Several small caravans had halted to wait for us, and men, horses, loads, and chairs were packed and jammed together so tightly that it seemed impossible ever to extricate them. Our arrival added to the confusion, but leaving the *mafus* to scream and chatter among themselves, we scouted ahead to learn the true condition of affairs.

Almost within sight we found the caravan which had been robbed. Paper and cloth were strewn about, loads overturned, and loose mules wandered over the hillside. The frightened *mafus* were straggling back and told us that about forty bandits had suddenly surrounded the caravan, shooting and brandishing long knives. Instantly the *mafus* had run for their lives leaving the brigands to rifle the packs unmolested. The goods chiefly belonged to the retiring mandarin of Li-chiang, and included some five thousand dollars worth of jade and gold dust, all of which was taken.

Yün-nan, like most of the outlying provinces of China, is infested with brigands who make traveling very unsafe. There are, of course, organized bands of robbers at all times, but these have been greatly augumented since the rebellion by dismissed soldiers or deserters who have taken to brigandage as the easiest means to avoid starvation.

The Chinese Government is totally unable to cope with the situation and makes only half-hearted attempts to punish even the most flagrant robberies, so that unguarded caravans carrying valuable material which ar-

The Pagodas at Ta-li Fu

The Dead of China

rive at their destination unmolested consider themselves very lucky.

So far as our expedition was concerned we did not feel great apprehension for it was generally known that we carried but little money and our equipment, except for guns, could not readily be disposed of. Throughout the entire expedition we paid our *mafus* and servants a part of their wages in advance when they were engaged, and arranged to have money sent by the mandarins or the British American Tobacco Co., to some large town which would be reached after several months. There the balance on salaries was paid and we carried with us only enough money for our daily needs.

Before we left Yün-nan Fu we were assured by the Foreign Office that we would be furnished with a guard of soldiers—an honor few foreigners escape! The first day out we had four, all armed with umbrellas! These accompanied us to the first camp where they delivered their official message to the *yamen* and intrusted us to the care of others for our next day's journey.

Sometimes they were equipped with guns of the vintage of 1872, but their cartridges were seldom of the same caliber as the rifles and in most cases the ubiquitous umbrella was their only weapon. Just what good they would be in a real attack it is difficult to imagine, except to divert attention by breaking the speed limits in running away.

Several times in the morning we believed we had escaped them but they always turned up in an hour or two. They were not so much a nuisance as an expense, for custom requires that each be paid twenty cents (Mexican) a day both going and returning. They are of some use in lending an official aspect to an expedition and in

requisitioning anything which may be needed; also they act as an insurance policy, for if a caravan is robbed a claim can be entered against the government, whereas if the escort is refused the traveler has no redress.

It is amusing and often irritating to see the cavalier way in which these men treat other caravans or the peasants along the road. Waving their arms and shouting oaths they shoo horses, mules or chairs out of the way regardless of the confusion into which the approaching caravan may be thrown. They must also be closely watched for they are none too honest and are prone to rely upon the moral support of foreigners to take whatever they wish without the formality of payment.

We were especially careful to respect the property on which we camped and to be just in all our dealings with the natives, but it was sometimes difficult to prevent the *mafus* or soldiers from tearing down fences for firewood or committing similar depredations. Wherever such acts were discovered we made suitable payment and punished the offenders by deducting a part of their wages. Foreigners cannot respect too carefully the rights of the peasants, for upon their conduct rests the reception which will be accorded to all others who follow in their footsteps.

CHAPTER XI

TA-LI FU

On Friday, September 23, we were at Chou Chou and camped in a picturesque little temple on the outskirts of the town. As the last stage was only six hours we spent half the morning in taking moving pictures of the caravan and left for Ta-li at eleven-thirty after an early *tiffin*.

About two o'clock in the afternoon we reached Hsia-kuan, a large commercial town at the lower end of the lake. Its population largely consists of merchants and it is by all means the most important business place of interior Yün-nan; Ta-li, eight miles away, is the residence and official city.

At Hsia-kuan we called upon the salt commissioner, Mr. Lui, to whom Mr. Bode, the salt inspector at Yün-nan Fu, had very kindly telegraphed money for my account, and after the usual tea and cigarettes we went on to Ta-li Fu over a perfectly level paved road, which was so slippery that it was well-nigh impossible for either horse or man to move over it faster than a walk.

This was the hottest day of our experience in Northern Yün-nan, the thermometer registering 85° + in the shade, which is the usual mid-summer temperature, but the moment the sun dropped behind the mountains it was cool enough for one to enjoy a fire. Even in the winter it is never very cold and its delightful summer should make Northern Yün-nan a wonderful health re-

sort for the residents of fever-stricken Burma and Tonking.

We rode toward Ta-li with the beautiful lake on our right hand and on the other the Ts'ang Shan mountains which rise to a height of fourteen thousand feet. As we approached the city we could see dimly outlined against the foothills the slender shafts of three ancient pagodas. They were erected to the *feng-shui,* the spirits of the "earth, wind, and water," and for fifteen hundred years have stood guard over the stone graves which, in countless thousands, are spread along the foot of the mountains like a vast gray blanket. In the late afternoon sunlight the walls of the city seemed to recede before us and the picturesque gate loomed shadowy and unreal even when we passed through its gloomy arch and clattered up the stone-paved street.

We soon discovered the residence of Mr. H. G. Evans, agent of the British American Tobacco Company, to whose care our first caravan had been consigned, and he very hospitably invited us to remain with him while we were in Ta-li Fu. This was only the beginning of Mr. Evans' assistance to the Expedition, for he acted as its banker throughout our stay in Yün-nan, cashing checks and transferring money for us whenever we needed funds.

The British American Tobacco Company and the Standard Oil Company of New York are veritable "oases in the desert" for travelers because their agencies are found in the most out-of-the-way spots in Asia and their employees are always ready to extend the cordial hospitality of the East to wandering foreigners.

Besides Mr. Evans the white residents of Ta-li Fu include the Reverend William J. Hanna, his wife and two

other ladies, all of the China Inland Mission. Mr. Hanna is doing a really splendid work, especially along educational and medical lines. He has built a beautiful little chapel, a large school, and a dispensary in connection with his house, where he and his wife are occupied every morning treating the minor ills of the natives, Christian and heathen alike.

Ta-li Fu was the scene of tremendous slaughter at the time of the Mohammedan war, when the Chinese captured the city through the treachery of its commander and turned the streets to rivers of blood. The Mohammedans were almost exterminated, and the ruined stone walls testify to the completeness of the Chinese devastation.

The mandarin at Ta-li Fu was good-natured but dissipated and corrupt. He called upon us the evening of our arrival and almost immediately asked if we had any shotgun cartridges. He remarked that he had a gun but no shells, and as we did not offer to give him any he continued to hint broadly at every opportunity.

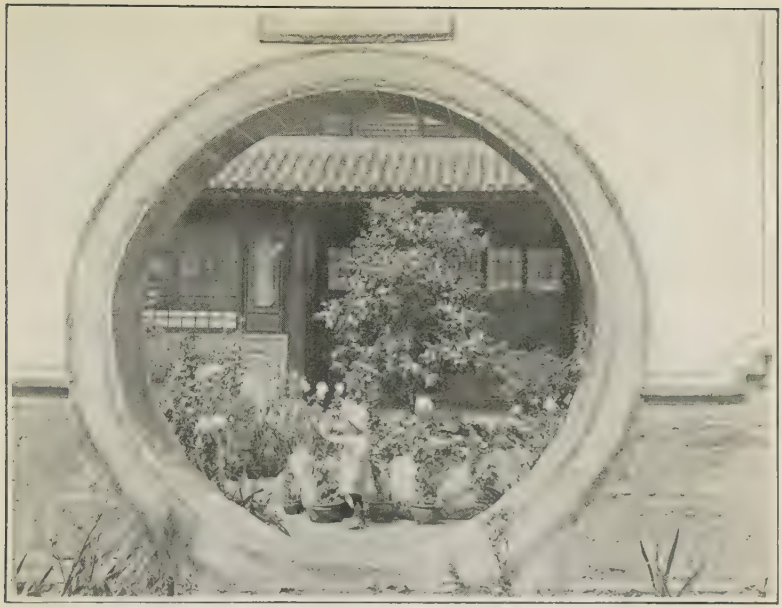
The mandarins of lower rank often buy their posts and depend upon what they can make in "squeeze" from the natives of their district for reimbursement and a profit on their investment. In almost every case which is brought to them for adjustment the decision is withheld until the magistrate has learned which of the parties is prepared to offer the highest price for a settlement in his favor. The Chinese peasant, accepting this as the established custom, pays the bribe without a murmur if it is not too exorbitant and, in fact, would be exceedingly surprised if "justice" were dispensed in any other way.

My personal relations with the various mandarins

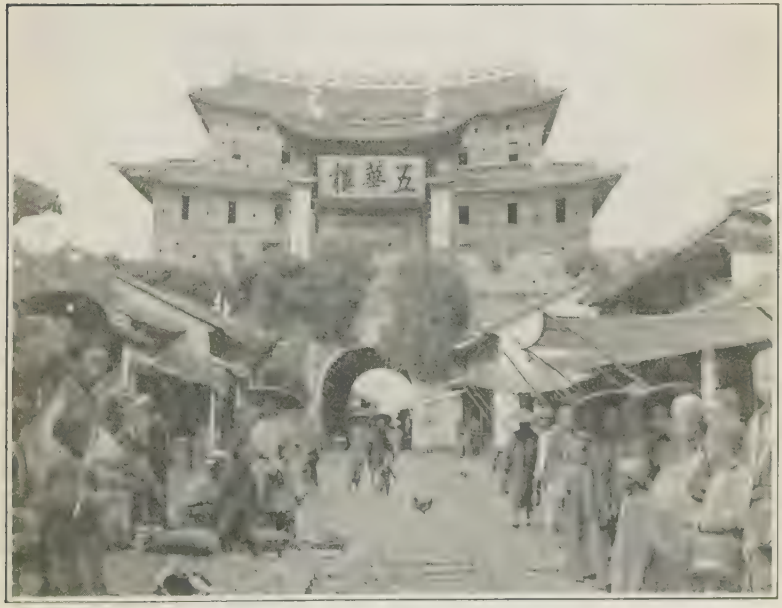
whom I was constantly required to visit officially were always of the pleasantest and I was treated with great courtesy. It was apparent wherever we were in China that there was a total lack of antiforeign feeling in both the peasant and official classes and except for the brigands, who are beyond the law, undoubtedly white men can travel in perfect safety anywhere in the republic. Before my first official visit Wu gave me a lesson in etiquette. The Chinese are exceedingly punctilious and it is necessary to conform to their standards of politeness for they do not realize, or accept in excuse, the fact that Western customs differ from their own.

At the end of the reception room in every *yamen* is a raised platform on which the visitor sits at the *left hand* of the mandarin; it would be exceedingly rude for a magistrate to seat the caller on his right hand. Tea is always served immediately but is not supposed to be tasted until the official does so himself; the cup must then be lifted to the lips with both hands. Usually when the magistrate sips his tea it is a sign that the interview is ended. When leaving, the mandarin follows his visitor to the doorway of the outer court, while the latter continually bows and protests asking him not to come so far.

Ta-li Fu and Hsia-kuan are important fur markets and we spent some time investigating the shops. One important find was the panda (*Ælurus fulgens*). The panda is an aberrant member of the raccoon family but looks rather like a fox; in fact the Chinese call it the "fire fox" because of its beautiful, red fur. Pandas were supposed to be exceedingly rare and we could hardly



The Residence of Rev. William J. Hanna at Ta-li Fu



The Gate and Main Street of Ta-li Fu

believe it possible when we saw dozens of coats made from their skins hanging in the fur shops.

Skins of the huge red-brown flying squirrel, *Petaruista yunnanensis,* were also used for clothing and the abundance of this animal was almost as great a surprise as the finding of the pandas. This is often true in the case of supposedly rare species. A few specimens may be obtained from the extreme limits of its range, or from a locality where it really is rare, and for years it may be almost unique in museum collections but eventually the proper locality may be visited and the animals found to be abundant.

We saw several skins of the beautiful cat (*Felis temmicki*) which, with the snow leopard (*Felis uncia*), it was said came from Tibet. Civets, bears, foxes, and small cats were being used extensively for furs and pangolins could be purchased in the medicine shops. The scales of the pangolin are considered to be of great value in the treatment of certain diseases and the skins are usually sold by the pound as are the horns of deer, wapiti, gorals, and serows.

Almost all of the fossil animals which have been obtained in China by foreigners have been purchased in apothecary shops. If a Chinaman discovers a fossil bed he guards it zealously for it represents an actual gold mine to him. The bones are ground into a fine powder, mixed with an acid, and a phosphate obtained which in reality has a certain value as a tonic. When a considerable amount of faith and Chinese superstition is added its efficacy assumes double proportions.

Every year a few tiger skins find their way to Hsiakuan from the southern part of the province along the Tonking border, but the good ones are quickly sold at

prices varying from twenty-five to fifty dollars (Mexican). Ten dollars is the usual price for leopard skins.

Marco Polo visited Ta-li Fu in the thirteenth century and, among other things, he speaks of the fine horses from this part of the province. We were surprised to find that the animals are considerably larger and more heavily built than those of Yün-nan Fu and appear to be better in every way. A good riding horse can be purchased for seventy-five dollars (Mexican) but mules are worth about one hundred and fifty dollars because they are considered better pack animals.

On the advice of men who had traveled much in the interior of Yün-nan we hired our caravan and riding animals instead of buying them outright, and subsequent experience showed the wisdom of this course. Saddle ponies, which are used only for short trips about the city, cannot endure continual traveling over the execrable roads of the interior where often it is impossible to feed them properly. If an entire caravan were purchased the leader of the expedition would have unceasing trouble with the *mafus* to insure even ordinary care of the animals, an opportunity would be given for endless "squeeze" in the purchase of food, and there are other reasons too numerous to mention why in this province the plan is impracticable.

However, the caravan ponies do try one's patience to the limit. They are trained only to follow a leader, and if one happens to be behind another horse it is well-nigh impossible to persuade it to pass. Beat or kick the beast as one will, it only backs up or crowds closely to the horse in front. On the first day out Heller, who was on a particularly bad animal, when trying to pass one of us began to cavort about like a circus rider, prancing

from side to side and backward but never going forward. We shouted that we would wait for him to go on but he replied helplessly, "I can't, this horse isn't under my management," and we found very soon that our animals were not under our management either!

In a town near Ta-li Fu we were in front of the caravan with Wu and Heller: Wu stopped to buy a basket of mushrooms but his horse refused to move ahead. Beat as he would, the animal only backed in a circle, ours followed, and in a few moments we were packed together so tightly that it was impossible even to dismount. There we sat, helpless, to the huge delight of the villagers until rescued by a *mafu*. As soon as he led Wu's horse forward the others proceeded as quietly as lambs.

We paid forty cents (Mexican) a day for each animal while traveling, and fifteen or twenty cents when in camp, but the rate varies somewhat in different parts of the province, and in the west and south, along the Burma border fifty cents is the usual price. When a caravan is engaged the necessary *mafus* are included and they buy food for themselves and beans and hay for the animals.

Ever since leaving Yün-nan Fu the cook we engaged at Paik-hoi had been a source of combined irritation and amusement. He was a lanky, effeminate gentleman who never before had ridden a horse, and who was physically and mentally unable to adapt himself to camp life. After five months in the field he appeared to be as helpless when the caravan camped for the night as when we first started, and he would stand vacantly staring until someone directed him what to do. But he was a good cook, when he wished to exert himself, and had the great

asset of knowing a considerable amount of English. While we were in Ta-li Fu Mr. Evans overheard him relating his experiences on the road to several of the other servants. "Of course," said the cook, "it is a fine way to see the country, but the riding! My goodness, that's awful! After the third day I didn't know whether to go on or turn back—I was so sore I couldn't sit down even on a chair to say nothing of a horse!"

He had evidently fully made up his mind not to "see the country" that way for the day after we left Ta-li Fu *en route* to the Tibetan frontier he became violently ill. Although we could find nothing the matter with him he made such a good case for himself that we believed he really was quite sick and treated him accordingly. The following morning, however, he sullenly refused to proceed, and we realized that his illness was of the mind rather than the body. As he had accepted two months' salary in advance and had already sent it to his wife in Paik-hoi, we were in a position to use a certain amount of forceful persuasion which entirely accomplished its object and illness did not trouble him thereafter.

The loss of a cook is a serious matter to a large expedition. Good meals and varied food must be provided if the personnel is to work at its highest efficiency and cooking requires a vast amount of thought and time. In Yün-nan natives who can cook foreign food are by no means easy to find and when our Paik-hoi gentleman finally left us upon our return to Ta-li Fu we were fortunate in obtaining an exceedingly competent man to take his place through the good offices of Mr. Hanna.

CHAPTER XII

LI-CHIANG AND "THE TEMPLE OF THE FLOWERS"

We left a part of our outfit with Mr. Evans at Ta-li Fu and with a new caravan of twenty-five animals traveled northward for six days to Li-chiang Fu. By taking a small road we hoped to find good collecting in the pine forests three days from Ta-li, but instead there was a total absence of animal life. The woods were beautiful, parklike stretches which in a country like California would be full of game, but here were silent and deserted. During the fourth and fifth days we were still in the forests, but on the sixth we crossed a pass 10,000 feet high and descended abruptly into a long marshy plain where at the far end were the gray outlines of Li-chiang dimly visible against the mountains.

Wu and I galloped ahead to find a temple for our camp, leaving Heller and my wife to follow. A few pages from her journal tell of their entry into the city.

We rode along a winding stone causeway and halted on the outskirts of the town to wait until the caravan arrived. Neither Roy nor Wu was in sight but we expected that the *mafus* would ask where they had gone and follow, for of course we could not speak a word of the language. Already there was quite a sensation as we came down the street, for our sudden appearance seemed to have stupefied the people with amazement. One old lady looked at me with an indescribable expression and

uttered what sounded exactly like a long-drawn "Mon Dieu" of disagreeable surprise.

I tried smiling at them but they appeared too astonished to appreciate our friendliness and in return merely stared with open mouths and eyes. We halted and immediately the street was blocked by crowds of men, women, and children who poured out of the houses, shops, and cross-streets to gaze in rapt attention. When the caravan arrived we moved on again expecting that the *mafus* had learned where Roy had gone, but they seemed to be wandering aimlessly through the narrow winding streets. Even though we did not find a camping place we afforded the natives intense delight.

I felt as though I were the chief actor in a circus parade at home, but the most remarkable attraction there could not have equaled our unparalleled success in Li-chiang. On the second excursion through the town we passed down a cross-street, and suddenly from a courtyard at the right we heard feminine voices speaking English.

"It's a girl. No, it's a boy. No, no, can't you see her hair, it's a girl!" Just then we caught sight of three ladies, unmistakably foreigners although dressed in Chinese costume. They were Mrs. A. Kok, wife of the resident Pentecostal Missionary, and two assistants, who rushed into the street as soon as they had determined my sex and literally "fell upon my neck." They had not seen a white woman since their arrival there four years ago and it seemed to them that I had suddenly dropped from the sky.

While we were talking Wu appeared to guide us to the camp. They had chosen a beautiful temple with a flower-filled courtyard on the summit of a hill overlooking the city. It was wonderfully clean and when our beds, tables, and chairs were spread on the broad stone porch it seemed like a real home.

The next days were busy ones for us all, Roy and Heller setting traps, and I working at my photography. We let it be known that we would pay well for specimens, and there was an

One of the Pagodas at Ta-li Fu

almost uninterrupted procession of men and boys carrying long sticks, on which were strung frogs, rats, toads, and snakes. They would simply beam with triumph and enthusiasm. Our fame spread and more came, bringing the most ridiculous tame things—pigeons, maltese cats, dogs, white rabbits, caged birds, and I even believe we might have purchased a girl baby or two, for mothers stood about with little brown kiddies on their backs as though they really would like to offer them to us but hardly dared.

The temple priest was a good looking, smooth-faced chap, and hidden under his coat he brought dozens of skins. I believe that his religious vows did not allow him to handle animals—openly—and so he would beckon Roy into the darkness of the temple with a most mysterious air, and would extract all sorts of things from his sleeves just like a sleight-of-hand performer. He was a rich man when we left!

The people are mostly tribesmen—Mosos, Lolos, Tibetans, and many others. The girls wear their hair "bobbed off" in front and with a long plait in back. They wash their hair once—on their wedding day—and then it is wrapped up in turbans for the rest of their lives. The Tibetan women dress their hair in dozens of tiny braids, but I don't believe there is any authority that they ever wash it, or themselves either.

Li-chiang was our first collecting camp and we never had a better one. On the morning after our arrival Heller found mammals in half his traps, and in the afternoon we each put out a line of forty traps which brought us fifty mammals of eleven species. This was a wonderful relief after the many days of travel through country devoid of animal life.

Our traps contained shrews of two species, meadow voles, Asiatic white-footed mice, spiny mice, rats, squirrels, and tree shrews. The small mammals were exceedingly abundant and easy to catch, but after the first day

we began to have difficulty with the natives who stole our traps. We usually marked them with a bit of cotton, and the boys would follow an entire line down a hedge, taking every one. Sometimes they even brought specimens to us for sale which we knew had been caught in our stolen traps!

The traps were set under logs and stumps and in the grass where we found the "runways" or paths which mice, rats and voles often make. These animals begin to move about just after dark, and we usually would inspect our traps with a lantern about nine o'clock in the evening. This not only gave the trap a double chance to be filled but we also secured perfect specimens, for such species as mice and shrews are cannibalistic, and almost every night, if the specimens were not taken out early in the evening, several would be partly eaten.

Small mammals are often of much greater interest and importance scientifically than large ones, for, especially among the Insectivores, there are many primitive forms which are apparently of ancestral stock and throw light on the evolutionary history of other living groups.

Li-chiang is a fur market of considerable importance for the Tibetans bring down vast quantities of skins for sale and trade. Lambs, goats, foxes, cats, civets, pandas, and flying squirrels hang in the shops and there are dozens of fur dressers who do really excellent tanning.

This city is a most interesting place especially on market day, for its inhabitants represent many different tribes with but comparatively few Chinese. By far the greatest percentage of natives are the Mosos who are semi-Tibetan in their life and customs. They were originally an independent race who ruled a considerable part

of northern Yün-nan, and Li-chiang was their ancient capital. To the effeminate and "highly civilized" Chinese they are "barbarians," but we found them to be simple, honest and wholly delightful people. Many of those whom we met later had never seen a white woman, and yet their inherent decency was in the greatest contrast to that of the Chinese who consider themselves so immeasurably their superior.

The Mosos have large herds of sheep and cattle, and this is the one place in the Orient except in large cities along the coast, where we could obtain fresh milk and butter. As with the Tibetans, buttered tea and *tsamba* (parched oatmeal) are the great essentials, but they also grow quantities of delicious vegetables and fruit. Buttered tea is prepared by churning fresh butter into hot tea until the two have become well mixed. It is then thickened with finely ground *tsamba* until a ball is formed which is eaten with the fingers. The combination is distinctly good when the ingredients are fresh, but if the butter happens to be rancid the less said of it the better.

The natives of this region are largely agriculturists and raise great quantities of squash, turnips, carrots, cabbage, potatoes, onions, corn, peas, beans, oranges, pears, persimmons and nuts. While traveling we filled our saddle pockets with pears and English walnuts or chestnuts and could replenish our stock at almost any village along the road.

Everything was absurdly cheap. Eggs were usually about eight cents (Mexican) a dozen, and we could always purchase a chicken for an empty tin can, or two for a bottle. In fact, the latter was the greatest desideratum and when offers of money failed to induce

a native to pose for the camera a bottle nearly always would decide matters in our favor.

In Li-chiang we learned that there was good shooting only twelve miles north of the city on the Snow Mountain range, the highest peak of which rises 18,000 feet above the sea. We left a part of our outfit at Mr. Kok's house and engaged a caravan of seventeen mules to take us to the hunting grounds. Mr. Kok assisted us in numberless ways while we were in the vicinity of Li-chiang and in other parts of the country. He took charge of all our mail, sending it to us by runners, loaned us money when it was difficult to get cash from Ta-li Fu and helped us to engage servants and caravans.

It had rained almost continually for five days and a dense gray curtain of fog hung far down in the valley, but on the morning of October 11 we awoke to find ourselves in another world. We were in a vast amphitheater of encircling mountains, white almost to their bases, rising ridge on ridge, like the foamy billows of a mighty ocean. At the north, silhouetted against the vivid blue of a cloudless sky, towered the great Snow Mountain, its jagged peaks crowned with gold where the morning sun had kissed their summits. We rode toward it across a level rock-strewn plain and watched the fleecy clouds form, and float upward to weave in and out or lose themselves in the vast snow craters beside the glacier. It was an inspiration, that beautiful mountain, lying so white and still in its cradle of dark green trees. Each hour it seemed more wonderful, more dominating in its grandeur, and we were glad to be of the chosen few to look upon its sacred beauty.

In the early afternoon we camped in a tiny temple which nestled into a grove of spruce trees on the out-

A Moso Herder

A Moso Woman

skirts of a straggling village. To the north the Snow Mountain rose almost above us, and on the east and south a grassy rock-strewn plain rolled away in gentle undulations to a range of hills which jutted into the valley like a great recumbent dragon.

A short time after our camp was established we had a visit from an Austrian botanist, Baron Haendel-Mazzetti, who had been in the village for two weeks. He had come to Yün-nan for the Vienna Museum before the war, expecting to remain a year, but already had been there three. Surrounded as he was by Tibet, Burma, and Tonking, his only possible exit was by way of the four-month overland journey to Shanghai. He had little money and for two years had been living on Chinese food. He dined with us in the evening, and his enjoyment of our coffee, bread, kippered herring, and other canned goods was almost pathetic.

A week after our arrival Baron Haendel-Mazzetti left for Yün-nan Fu and eventually reached Shanghai which, however, became a closed port to him upon China's entry into the European war. It is to be hoped that his collections, which must be of great scientific value and importance, have arrived at a place of safety long ere this book issues from the press.

CHAPTER XIII

CAMPING IN THE CLOUDS

We hired four Moso hunters in the Snow Mountain village. They were picturesque fellows, supposedly dressed in skins, but their garments were so ragged and patched that it was difficult to determine the original material of which they were made.

One of them was armed with a most extraordinary gun which, it was said, came from Tibet. Its barrel was more than six feet long, and the stock was curved like a golf stick. A powder fuse projected from a hole in the side of the barrel, and just behind it on the butt was fastened a forked spring. At his waist the man carried a long coil of rope, the slowly burning end of which was placed in the crotched spring. When about to shoot the native placed the butt of the weapon against his cheek, pressed the spring so that the burning rope's end touched the powder fuse, and off went the gun.

The three other hunters carried crossbows and poisoned arrows. They were remarkably good shots and at a distance of one hundred feet could place an arrow in a six-inch circle four times out of five. We found later that crossbows are in common use throughout the more remote parts of Yün-nan and were only another evidence that we had suddenly dropped back into the Middle Ages and, with our high-power rifles and twentieth century equipment, were anachronisms.

The natives are able to obtain a good deal of game

even with such primitive weapons for they depend largely upon dogs which bring gorals and serows to bay against a cliff and hold them until the men arrive. The dogs are a mongrel breed which appears to be largely hound, and some are really excellent hunters. White is the usual color but a few are mixed black and brown, or fox red. Hotenfa, one of our Mosos, owned a good pack and we all came to love its big red leader. This fine dog could be depended upon to dig out game if there was any in the mountains, but his life with us was short for he was killed by our first serow. Hotenfa was inconsolable and the tears he shed were in sincere sorrow for the loss of a faithful friend.

Almost every family owns a dog. Some of those we saw while passing through Chinese villages were nauseating in their unsightliness, for at least thirty per cent of them were more or less diseased. Barely able to walk, they would stagger across the street or lie in the gutter in indescribable filth. One longed to put them out of their misery with a bullet but, although they seemed to belong to nobody, if one was killed an owner appeared like magic to quarrel over the damages.

The dogs of the non-Chinese tribes were in fairly good condition and there seemed to be comparatively little disease among them. Our hunters treated their hounds kindly and fed them well, but the animals themselves, although loyal to their masters, manifested but little affection. In Korea dogs are eaten by the natives, but none of the tribes with which we came in contact in Yün-nan used them for food.

On our first day in the temple Heller went up the Snow Mountain for a reconnoissance and the party secured a fine porcupine. It is quite a different animal

from the American tree porcupines and represents a genus (*Hystrix*) which is found in Asia, Africa, and southern Europe. This species lives in burrows and, when hunting big game, we were often greatly annoyed to find that our dogs had followed the trail of one of these animals. We would arrive to see the hounds dancing about the burrow yelping excitedly instead of having a goral at bay as we had expected.

Some of the beautiful black and ivory white quills are more than twelve inches long and very sharp. A porcupine will keep an entire pack of dogs at bay and is almost sure to drive its murderous weapons into the bodies of some of them unless the hunters arrive in a short time. The Mosos eat the flesh which is white and fine.

Although we were only twelve miles from Li-chiang the traps yielded four shrews and one mouse which were new to our collection. The natives brought in three bats which we had not previously seen and began a thriving business in toads and frogs with now and then a snake.

The temple was an excellent place for small mammals but it was evident that we would have to move high up on the slopes of the mountain if gorals and other big game were to be obtained. Accordingly, while Heller prepared a number of bat skins we started out on horseback to hunt a camp site.

It was a glorious day with the sun shining brilliantly from a cloudless sky and just a touch of autumn snap in the air. We crossed the sloping rock-strewn plain to the base of the mountain, and discovered a trail which led up a forested shoulder to the right of the main peaks. An hour of steady climbing brought us to the summit of the ridge where we struck into the woods

The Snow Mountain

toward a snow-field on the opposite slope. The trail led us along the brink of a steep escarpment from which we could look over the valley and away into the blue distance toward Li-chiang. Three thousand feet below us the roof of our temple gleamed from among the sheltering pine trees, and the herds of sheep and cattle massed themselves into moving patches on the smooth brown plain.

We pushed our way through the spruce forest with the glistening snow bed as a beacon and suddenly emerged into a flat open meadow overshadowed by the ragged peaks. "What a perfectly wonderful place to camp," we both exclaimed. "If we can only find water, let's come tomorrow."

The hunters had assured us that there were no streams on this end of the mountain but we hoped to find a snow bank which would supply our camp for a few days at least. We rode slowly up the meadow reveling in the grandeur of the snow-crowned pinnacles and feeling very small and helpless amid surroundings where nature had so magnificently expressed herself.

At the far end of the meadow we discovered a dry creek bed which led upward through the dense spruce forest. "Where water has been, water may be again," we argued and, leading the horses, picked our way among the trees and over fallen logs to a fairly open hill slope where we attempted to ride, but our animals were nearly done. After climbing a few feet they stood with heaving sides and trembling legs the breath rasping through distended nostrils. We felt the altitude almost as badly as the horses for the meadow itself was twelve thousand feet above the level of the sea and the air was very thin.

There seemed to be no hope of finding even a suitable snow bank when it was slowly borne in upon us that the subdued roaring in our ears was the sound of water and not the effect of altitude as we both imagined. Above and to the left was a sheer cliff, hundreds of feet in height, and as we toiled upward and emerged beyond timber line we caught a glimpse of a silver ribbon streaming down its face. It came from a melting snow crater and we could follow its course with our eyes to where it swung downward along a rock wall not far from the upper end of the meadow. It was so hidden by the trees that had we not climbed above timber line, it never would have been discovered.

This solved the question of our camp and we looked about us happily. On the way through the forest we had noticed small mammal runways under almost every log and, when we stood above the tree limit, the grassy slope was cut by an intricate network of tiny tunnels. These were plainly the work of a meadow vole (*Microtus*) and at this altitude it certainly would prove to be a species new to our collection.

The sun had already dropped behind the mountain and the meadow was in shadow when we reached it again on our homeward way. By five o'clock we were in the temple eating a belated tiffin and making preparations for an early start. But our hopes were idle, for in the morning three of the mules had strayed, and we did not arrive at the meadow until two o'clock in the afternoon.

Our camp was made just at the edge of the spruce forest a few hundred yards from the snow stream. As soon as the tents were up we climbed to the grassy slope above timber line, with Heller, to set a string of traps

A Cheek Gun Used by One of Our Hunters

The First Goral Killed on the Snow Mountain

in the vole runways and under logs and stumps in the forest.

The hunters made their camp beside a huge rock a short distance away and slept in their ragged clothes without a blanket or shelter of any kind. It was delightfully warm, even at this altitude, when the sun was out, but as soon as it disappeared we needed a fire and the nights were freezing cold; yet the natives did not seem to mind it in the slightest and refused our offer of a canvas tent fly.

We never will forget that first night on the Snow Mountain. As we sat at dinner about the campfire we could see the somber mass of the forest losing itself in the darkness, and felt the unseen presence of the mighty peaks standing guard about our mountain home. We slept, breathing the strong, sweet perfume of the spruce trees and dreamed that we two were wandering alone through the forest opening the treasure boxes of the Wild.

CHAPTER XIV

THE FIRST GORAL

We were awakened before daylight by Wu's long drawn call to the hunters, *"L-a-o-u H-o, L-a-o-u H-o, L-a-o-u H-o."* The steady drum of rain on our tent shot a thrill of disappointment through me as I opened my eyes, but before we had crawled out of our sleeping-bags and dressed it lessened to a gentle patter and soon ceased altogether. It left a cold, gray morning with dense clouds weaving in and out among the peaks but, nevertheless, I decided to go out with the hunters to try for goral.

Two of the men took the dogs around the base of a high rock shoulder sparsely covered with scrub spruce while I went up the opposite slope accompanied by the other two. We had not been away from camp half an hour when the dogs began to yelp and almost immediately we heard them coming around the summit of the ridge in our direction. The hunters made frantic signs for me to hurry up the steep slope but in the thin air with my heart pounding like a trip hammer I could not go faster than a walk.

We climbed about three hundred yards when suddenly the dogs appeared on the side of the cliff near the summit. Just in front of them was a bounding gray form. The mist closed in and we lost both dogs and animals but ten minutes later a blessed gust of wind drifted the fog away and the goral was indistinctly vis-

Hotenfa, One of Our Moso Hunters, Bringing in a Goral

Another Moso Hunter with a Porcupine

ible with its back to a rock ledge facing the dogs. The big red leader of the pack now and then dashed in for a nip at the animal's throat but was kept at bay by its vicious lunges and sharp horns.

It was nearly three hundred yards away but the cloud was drifting in again and I dropped down for a shot. The hunters were running up the slope, frantically waving for me to come on, thinking it madness to shoot at that distance. I could just see the gray form through the sights and the first two shots spattered the loose rock about a foot low. For the third I got a dead rest over a stone and as the crash of the little Mannlicher echoed up the gorge, the goral threw itself into the air whirling over and over onto the rocks below.

The hunters, mad with excitement, dashed up the hill and down into the stream bed, and when I arrived the goral lay on a grassy ledge beside the water. The animal was stone dead, for my bullet had passed through its lungs, and, although the front teeth had been smashed on the rocks, its horns were uninjured and the beautiful gray coat was in perfect condition. It so happened that this ram was the largest which we killed on the entire trip.

When the hunters were carrying the goral to camp we met Yvette and Heller on their way to visit the traps just below snow line, and she returned with me to photograph the animal and to watch the ceremonies which I knew would be performed. One of the natives cut a leafy branch, placed the goral upon it and at the first cut chanted a prayer. Then laying several leaves one upon the other he sliced off the tip of the heart, wrapped it carefully in the leaves and placed it in a nearby tree as an offering to the God of the Hunt.

I have often seen the Chinese and Korean hunters perform similar ceremonies at the death of an animal, and the idea that it is necessary to propitiate the God of the Hunt is universal. When I was shooting in Korea in 1912, and also in other parts of China, if luck had been against us for a few days the hunters would invariably ask me to buy a chicken, or some animal to sacrifice for "good joss."

After each dog had had a taste of the goral's blood we again climbed the cliff at the end of the meadow. When we were nearly 2,000 feet above camp the clouds shut in and, as the impenetrable gray curtain wrapped itself about us, we could only sit quietly and wait for it to drift away.

After an hour the fog began to thin and the men sent the hounds toward a talus slope at the base of the highest peak. Almost immediately the big red dog picked up a trail and started across the loose rock with the pack yelping at his heels. We followed as rapidly as possible over such hard going but before we reached the other side the dogs had rounded a sharp pinnacle and disappeared far below us. Expecting that the goral would swing about the base of the peak the hunters sent me back across the talus to watch for a shot, but the animal ran down the valley and into a heavily wooded ravine where the dogs lost his trail only a short distance above camp.

I returned to find that Heller had secured a rich haul from the traps. As we supposed, the runways which Yvette and I had discovered above timber line were made by a meadow vole (*Microtus*) and in the forest almost every trap had caught a white-footed mouse (*Apodemus*). He also had several new shrews and we

caught eight different species of these important little animals at this one camp.

Wu, the interpreter, hearing us speak of shrews, came to me one day in great perplexity with his Anglo-Chinese dictionary. He had looked up the word "shrew" and found that it meant "a cantankerous woman!"

The following day Heller went out with the hunters and saw two gorals but did not get a shot. In the meantime Yvette and I ran the traps and prepared the small mammals. While we were far up on the mountain-side, Baron Haendel-Mazzetti appeared armed with ropes and an alpine snow ax. He was about to attempt to climb the highest peak which had never been ascended but the drifts turned him back several hundred feet from the summit. He dined at our camp and as all of us carefully refrained from "war talk" we spent a very pleasant evening. During his three years in Yünnan he had explored and mapped many sections of the province which had not been visited previously by foreigners and from him we obtained much valuable information.

On the third morning we were up before daylight and I left with the hunters in the gray dawn. We climbed steadily for an hour after leaving camp and, when well up on the mountain-side, skirted the base of a huge peak through a dense forest of spruce and low bamboo thickets, emerging upon a steep grassy meadow; this abutted on a sheer rock wall at the upper end, and below ran into a thick evergreen forest.

As we entered the meadow the big red leading dog, trotted off by himself toward the rock wall above us, and in a few moments we heard his sharp yelps near

the summit. Instantly the pack was off stringing out in a long line up the hillside.

We had nearly crossed the open slope and were standing on the edge of a deep gully when the dogs gave tongue and as soon as the hunters were sure they were coming in our direction we hurried to the bottom of the gorge and began the sharp ascent on the other side. It was almost straight up and before we had gone a hundred feet we were all gasping for breath and my legs seemed like bars of lead, but the staccato yelps of the dogs sounding closer and closer kept us going.

When we finally dropped on the summit of the hill I was absolutely done. I lay flat on my back for a few minutes and got to my knees just as the goral appeared on the opposite cliff. The sight of the magnificent animal bounding like rubber from ledges which his feet seemed hardly to touch down the face of a sheer wall, will remain in my memory as long as I live. He seemed the very spirit of the mountains, a thing born of peaks and crags, vibrant with the breath of the clouds. Selecting a spot which he must touch in the next flying leap, I waited until his body darkened the sights and then pulled the trigger.

The game little brute collapsed, then struggled to his feet, and with a tremendous leap landed on a projecting shelf of rock four yards below. Instantly I fired again and he sank down in a crumpled gray mass not two feet from the edge of the precipice which fell away in a dizzy drop of six hundred feet.

The dogs were on him long before we had worked our way down the cañon and up to the shelf where he lay. He was a fine ram nearly as large as the first one I had killed. I wanted to rest the dogs for they

were very tired from their two days of hunting, so I decided to return to camp with the men. On the way a second goral was started but it swung about the summit of the wooded ridge instead of coming in my direction, giving one of the hunters a shot with his crossbow, which he missed.

It was a beautiful day. Above us the sky was clear and blue but the clouds still lay thickly over the meadow and the camp was invisible. The billowy masses clung to the forest line, but from the slopes above them we could look far across the valley into the blue distance where the snow-covered summits of range after range of magnificent mountains lay shining in the sun like beaten silver. There was a strange fascination about those mountains, and I thrilled with the thought that for twelve long months I was free to roam where I willed and explore their hidden mysteries.

CHAPTER XV

MORE GORALS

Both gorals were fine old rams with perfect horns. Their hair was thick and soft, pale olive-buff tipped with brownish, and the legs on the "cannon bones" were buff-yellow like the margins of the throat patches. Their color made them practically invisible against the rocks and when I killed the second goral my only distinct impression as he dashed down the face of the precipice, was of four yellowish legs entirely separated from a body which I could hardly see.

This invisibility, combined with the fact that the Snow Mountain gorals lived on almost inaccessible cliffs thickly covered with scrub spruce forest, made "still hunting" impossible. In fact, Baron Haendel-Mazzetti, who had explored this part of the Snow Mountains fairly thoroughly in his search for plants, had never seen a goral, and did not know that such an animal existed there.

Heller hunted for two days in succession and, although he saw several gorals, he was not successful in getting one until we had been in camp almost a week. His was a young male not more than a year old with horns about an inch long. It was a valuable addition to our collection for I was anxious to obtain specimens of various ages to be mounted as a "habitat group" in the Museum and we lacked only a female.

The preparation of the group required the greatest

care and study. First, we selected a proper spot to reproduce in the Museum, and Yvette took a series of natural color photographs to guide the artist in painting the background. Next she made detail photographs of the surroundings. Then we collected portions of the rocks and typical bits of vegetation such as moss and leaves, to be either dried or preserved in formalin. In a large group, perhaps several thousand leaves will be required, but the field naturalist need select typical specimens of only five or six different sizes from each of which a plaster mold can be made at the Museum and the leaves reproduced in wax.

After two days of rain during which I had a hard and unsuccessful hunt for serows we decided to return to the temple at the foot of the mountain which was nearer to the forests inhabited by these animals. We had already been in our camp on the meadow for nine days and, besides the gorals, had gathered a large and valuable collection of small mammals. The shrews were especially varied in species and, besides a splendid series of meadow voles, Asiatic mice and rats, we obtained a new weasel and a single specimen of a tiny rock-cony or little chief hare, an Asiatic genus (*Ochotona*) which is also found in the western part of North America on the high slopes of the Rocky Mountains. Although we set dozens of traps among the rocks we did not get another on the entire expedition nor did we see indications of their presence in other localities.

The almost complete absence of carnivores at this camp was a great surprise. Except for weasels we saw no others and the hunters said that foxes or civets did not occur on this side of the mountain even though food was abundant.

On the day before we went to the temple I had a magnificent hunt. We left camp at daylight in a heavy fog and almost at once the dogs took up a serow trail. We heard them coming toward us as we stood at the upper edge of a little meadow and expected the animal to break cover any moment, but it turned down the mountain and the hounds lost the trail in the thick spruce woods.

We climbed slowly toward the cliffs until we were well above the clouds, which lay in a thick white blanket over the camp, and headed for the cañon where I had shot my second goral. Hotenfa wished to go lower down into the forests but I prevailed upon him to stay along the open slopes and, while we were resting, the big red dog suddenly gave tongue on a ridge above and to the right of us. It was in the exact spot where my second goral had been started and we were on the *qui vive* when the rest of the pack dashed up the mountain-side to join their leader.

In a few moments they all gave tongue and we heard them swinging about in our direction. Just then the clouds, which had been lying in a solid bank below us, began to drift upward in a long, thin finger toward the cañon. On and on it came, and closer sounded the yelps of the dogs. I was trembling with impatience and swearing softly as the gray vapor streamed into the gorge. The cloud thickened, sweeping rapidly up the ravine, until we were enveloped so completely that I could hardly see the length of my gun barrel. A moment later we heard the goral leaping down the cliff not a hundred yards away.

With the rifle useless in my hands I listened to each hoof beat and the stones which his flying feet sent rat-

tling into the gorge. Then the dogs came past, and we heard them follow down the rocks, their yelps growing fainter and fainter in the valley far below. The goral was lost, and as though the Fates were laughing at us, ten minutes later a puff of wind sucked the cloud out of the cañon as swiftly as it had come, and above us shone a sky as clear and blue as a tropic sea.

Hotenfa's disgust more than equaled my own for I had loaned him my three-barrel gun (12 gauge and .303 Savage) and he was as excited as a child with a new toy. He was a remarkably intelligent man and mastered the safety catches in a short time even though he had never before seen a breach-loading gun.

There was nothing to do but hurry down the mountain for the dogs might bring the goral to bay on one of the cliffs below us, and in twenty minutes we stood on a ridge which jutted out from the thick spruce forest. One of the hunters picked his way down the rock wall while Hotenfa and I circled the top of the spur.

We had not gone a hundred yards when the hunter shouted that a goral was running in our direction. Hotenfa reached the edge of the ridge before me, and I saw him fire with the three-barrel gun at a goral which disappeared into the brush. His bullet struck the dirt only a few feet behind the animal although it must have been well beyond a hundred yards and almost straight below us.

Hardly had we drawn back when a yell from the other hunter brought us again to the edge of the cliff just in time to see a second goral dash into the forest a good three hundred yards away in the very bottom of the gorge.

Rather disappointed we continued along the ridge and

Hotenfa made signs which said as plainly as words, "I told you so. The gorals are not on the peaks but down in the forest. We ought to have come here first."

There were not many moments for regret, however, for this was "our busy day." Suddenly a burst of frantic yelps from the red dog turned us off to the left and we heard him nearing the summit of the spur which we had just left. One of the other hunters was standing there and his crossbow twanged as the goral passed only a few yards from him, but the wicked little poisoned dart stuck quivering into a tree a few inches above the animal's back.

The goral dashed over the ridge almost on top of the second hunter who was too surprised to shoot and only yelled that it was coming toward us on the cliff below. Hotenfa leaped from rock to rock, almost like a goat himself, and dashed through the bushes toward a jutting shelf which overhung the gorge.

We reached the rim at the same moment and saw a huge ram standing on a narrow ledge a hundred yards below. I fired instantly and the noble animal, with feet wide spread, and head thrown back, launched himself into space falling six hundred feet to the rocks beneath us.

As the goral leaped Hotenfa seemed suddenly to go insane. Yelling with joy, he threw his arms about my neck, rubbing my face with his and pounding me on the back until I thought he would throw us both off the cliff. I was utterly dumfounded but seized his three-barrel gun to unload it for in his excitement there was imminent danger that he would shoot either himself or me.

Then I realized what it was all about. We had both

fired simultaneously and neither had heard the other's shot. By mistake Hotenfa had discharged a load of buckshot and it was my bullet which had killed the goral but his joy was so great that I would not for anything have disillusioned him.

It was a half hour's hard work to get to the place where the goral had fallen. The dogs were already there lying quietly beside the animal when we arrived. My bullet had entered the back just in front of the hind leg and ranged forward through the lungs flattening itself against the breast bone; the jacket had split, one piece tearing into the heart, so that the ram was probably dead before it struck the rocks.

I photographed the goral where it lay and after it had been eviscerated, and the hunters had performed their ceremonies to the God of the Hunt, I sent one of them back with it while Hotenfa and I worked toward the bottom of the cañon in the hope of finding the other animals.

It was a delightfully warm day and Hotenfa told me in his vivid sign language that the gorals were likely to be asleep on the sunny side of the ravine; therefore we worked up the opposite slope.

It was the hardest kind of climbing and for two hours we plodded steadily upward, clinging by feet and hands to bushes and rocks, and were almost exhausted when we reached a small open patch of grass about two thirds of the way to the summit.

We rested for half an hour and, after a light tiffin, toiled on again. I had not gone thirty feet, and Hotenfa was still sitting down, when I saw him wave his arm excitedly and throw up his gun to shoot. I leaped down to his side just as he fired at a big female goral which

was sound asleep in an open patch of grass on the mountain-side.

Hotenfa's bullet broke the animal's foreleg at the knee but without the slightest sign of injury she dashed down the cliff. I fired as she ran, striking her squarely in the heart, and she pitched headlong into the bushes a hundred feet below.

How Hotenfa managed to pack that animal to the summit of the ridge I never can understand, for with a light sack upon my back and a rifle it was all I could do to pull myself up the rocks. He was completely done when we finally threw ourselves on the grass at the edge of the meadow which we had left in the morning. Hotenfa chanted his prayer when we opened the goral, but the God of the Hunt missed his offering for my bullet had smashed the heart to a pulp.

On our way back to camp the red dog, although dead tired, disappeared alone into the heavy forest below us. Suddenly we heard his deep bay coming up the hill in our direction. Hotenfa and I dropped our burdens and ran to an opening in the forest where we thought the animal must pass.

Instead of coming out where we expected, the dog appeared higher up at the heels of a crested muntjac (*Elaphodus*), which was bounding along at full speed, its white flag standing straight up over its dark bluish back. I had one chance for a shot at about one hundred and fifty yards as the pair crossed a little opening in the trees, but it was too dangerous to shoot for, had I missed the deer, the dog certainly would have been killed.

I was heart-broken over losing this animal, for it is an exceedingly rare species, but a few days later a

A Typical Gobal Cliff on the Snow Mountain

shepherd brought in another which had been wounded by one of our Lolo hunters and had run down into the plains to die.

When we reached the hill above camp Yvette ran out to meet us, falling over logs and bushes in her eagerness to see what we were carrying. No dinner which I have ever eaten tasted like the one we had of goral steak that night and after a smoke I crawled into my sleeping bag, dead tired in body but with a happy heart.

CHAPTER XVI

THE SNOW MOUNTAIN TEMPLE

On October 22, we moved to the foot of the mountain and camped in the temple which we had formerly occupied. This was directly below the forests inhabited by serow, and we expected to devote our efforts exclusively toward obtaining a representative series of these animals.

Unfortunately I developed a severe infection in the palm of my right hand almost immediately, and had it not been for the devoted care of my wife I should not have left China alive. Through terrible nights of delirium when the poison was threatening to spread over my entire body, she nursed me with an utter disregard of her own health and slept only during a few restless hours of complete exhaustion. For three weeks I could do no work but at last was able to bend my "trigger finger" and resume hunting although I did not entirely recover the use of my hand for several months.

However, the work of the expedition by no means ceased because of my illness. Mr. Heller continued to collect small mammals with great energy and the day after we arrived at the temple we engaged eight new native hunters. These were Lolos, a wandering unit from the independent tribe of S'suchuan and they proved to be excellent men.

The first serow was killed by Hotenfa's party on our third day in the temple. Heller went out with the hunt-

ers but in a few hours returned alone. A short time after he had left the natives the dogs took up the trail of a huge serow and followed it for three miles through the spruce forest. They finally brought the animal to bay against a cliff and a furious fight ensued. One dog was ripped wide open, another received a horn-thrust in the side, and the big red leader was thrown over a cliff to the rocks below. More of the hounds undoubtedly would have been killed had not the hunters arrived and shot the animal.

The men brought the serow in late at night but our joy was considerably dampened by the loss of the red dog. Hotenfa carried him in his arms and laid him gently on a blanket in the temple but the splendid animal died during the night. His master cried like a child and I am sure that he felt more real sorrow than he would have shown at the loss of his wife; for wives are much easier to get in China than good hunting dogs.

The serow was an adult male, badly scarred from fighting, and had lost one horn by falling over a cliff when he was killed. He was brownish black, with rusty red lower legs and a whitish mane. His right horn was nine and three-quarters inches in length and five and three-quarters inches in circumference at the base and the effectiveness with which he had used his horns against the dogs demonstrated that they were by no means only for ornaments. In the next chapter the habits and relationships of the gorals and serows will be considered more fully.

On the morning following the capture of the first serow the last rain of the season began and continued for nine days almost without ceasing. The weather made

hunting practically impossible for the fog hung so thickly over the woods that one could not see a hundred feet and Heller found that many of his small traps were sprung by the raindrops. The Lolos had disappeared, and we believed that they had returned to their village, but they had been hunting in spite of the weather and on the fifth day arrived with a fine male serow in perfect condition. It showed a most interesting color variation for, instead of red, the lower legs were buff with hardly a tinge of reddish.

November 2, the sun rose in an absolutely cloudless sky and during the remainder of the winter we had as perfect weather as one could wish. Yvette's constant nursing and efficient surgery combined with the devotion of our interpreter, Wu, had checked the spread of the poison in my hand and my nights were no longer haunted with the strange fancies of delirium, but I was as helpless as a babe. I could do nothing but sit with steaming cloths wrapped about my arm and rail at the fate which kept me useless in the temple.

The Lolos killed a third serow on the mountain just above our camp but the animal fell into a rock fissure more than a hundred feet deep and was recovered only after a day's hard work. The men wove a swinging ladder from tough vines, climbed down it, and drew the serow bodily up the cliff; as it weighed nearly three hundred pounds this was by no means an easy undertaking.

Our Lolo hunters were tall, handsome fellows led by a slender young chief with patrician features who ruled his village like an autocrat with absolute power of life and death. The Lolos are a strange people who at one time probably occupied much of the region south

of the Yangtze River but were pushed south and west by the Chinese and, except in one instance, now exist only in scattered units in the provinces of Kwei-chau and Yün-nan.

In S'suchuan the Lolos hold a vast territory which is absolutely closed to the Chinese on pain of death and over which they exercise no control. Several expeditions have been launched against the Lolos but all have ended in disaster.

Only a few weeks before we arrived in Yün-nan a number of Chinese soldiers butchered nearly a hundred Lolos whom they had encountered outside the independent territory, and in reprisal the Lolos burned several villages almost under the walls of a fortified city in which were five hundred soldiers, massacred all the men and boys, and carried off the women as slaves.

The pure blood Lolos "are a very fine tall race, with comparatively fair complexions, and often with straight features, suggesting a mixture of Mongolian with some more straight-featured race. Their appearance marks them as closely connected by race with the eastern Tibetans, the latter being, if anything, rather the bigger men of the two." [1] They are great wanderers and over a very large part of Yün-nan form the bulk of the hill population, being the most numerous of all the non-Chinese tribes in the province.

Like almost every race which has been conquered by the Chinese or has come into continual contact with them for a few generations, the Lolos of Yün-nan, where they are in isolated villages, are being absorbed by the Chinese. We found, as did Major Davies, that in some

[1] "Yün-nan, the Link between India and the Yangtze," by Major H. R. Davies, 1909, p. 389.

instances they were giving up their language and beginning to talk Chinese even among themselves. The women already had begun to tie up their feet in the Chinese fashion and even disliked to be called Lolos.

Those whom we employed were living entirely by hunting and, although we found them amiable enough, they were exceedingly independent. They preferred to hunt alone, although they recognized what an increased chance for game our high-power rifles gave them, and eventually left us while I was away on a short trip, even though we still owed them considerable money.

The Lolos are only one of the non-Chinese tribes of Yün-nan. Major Davies has considered this question in his valuable book to which I have already referred, and I cannot do better than quote his remarks here.

> The numerous non-Chinese tribes that the traveler encounters in western China, form perhaps one of the most interesting features of travel in that country. It is safe to assert that in hardly any other part of the world is there such a large variety of languages and dialects, as are to be heard in the country which lies between Assam and the eastern border of Yün-nan and in the Indo-Chinese countries to the south of this region.
>
> The reason of this is not hard to find. It lies in the physical characteristics of the country. It is the high mountain ranges and the deep swift-flowing rivers that have brought about the differences in customs and language, and the innumerable tribal distinctions, which are so perplexing to the enquirer into Indo-Chinese ethnology.
>
> A tribe has entered Yün-nan from their original Himalayan or Tibetan home, and after increasing in numbers have found the land they have settled on not equal to their wants. The natural result has been the emigration of part of the colony. The

emigrants, having surmounted pathless mountains and crossed unbridged rivers on extemporized rafts, have found a new place to settle in, and have felt no inclination to undertake such a journey again to revisit their old home.

Being without a written character in which to preserve their traditions, cut off from all civilizing influence of the outside world, and occupied merely in growing crops enough to support themselves, the recollection of their connection with their original ancestors has died out. It is not then surprising that they should now consider themselves a totally distinct race from the parent stock. Inter-tribal wars, and the practice of slave raiding so common among the wilder members of the Indo-Chinese family, have helped to still further widen the breach. In fact it may be considered remarkable that after being separated for hundreds, and perhaps in some case for thousands, of years, the languages of two distant tribes of the same family should bear to each other the marked general resemblance which is still to be found.

The hilly nature of the country and the consequent lack of good means of communication have also naturally militated against the formation of any large kingdoms with effective control over the mountainous districts. Directly we get to a flat country with good roads and navigable rivers, we find the tribal distinctions disappear, and the whole of the inhabitants are welded into a homogeneous people under a settled government, speaking one language.

Burmese as heard throughout the Irrawaddy valley is the same everywhere. A traveler from Rangoon to Bhamo will find one language spoken throughout his journey, but an expedition of the same length in the hilly country to the east or to the west of the Irrawaddy valley would bring him into contact with twenty mutually unintelligible tongues.

The same state of things applies to Siam and Tong-king—one nation speaking one language in the flat country and a Tower of Babel in the hills (*loc. cit.*, pp. 332-333).

CHAPTER XVII

GORALS AND SEROWS

Gorals and serows belong to the subfamily *Rupicaprinæ* which is an early mountain-living offshoot of the *Bovidæ;* it also includes the chamois, takin, and the so-called Rocky Mountain goat of America. The animals are commonly referred to as "goat-antelopes" in order to express the intermediate position which they apparently hold between the goats and antelopes. They are also sometimes called the Rupicaprine antelopes from the scientific name of the chamois (*Rupicapra*).

The horns of all members of the group are finely ridged, subcylindrical and are present in both sexes, being almost as long in the female as in the male. Although no one would suspect that the gorals are more closely related to the takins than to the serows, which they resemble superficially, such seems to be the case, but the cranial differences between the two genera are to a certain extent bridged over by the skull of the small Japanese serow (*Capricornulus crispus*). This species is most interesting because of its intermediate position. In size it is larger than a goral but smaller than a serow; its long coat and its horns resemble those of a goral but it has the face gland and short tail of a serow. It is found in Japan, Manchuria and southern Siberia.

The principal external difference between the gorals and serows, besides that of size, is in the fact that the serows have a short tail and a well developed face gland,

A Serow Killed on the Snow Mountain

The Head of a Serow

which opens in front of the eyes by a small orifice, while the gorals have a long tail and no such gland.

In the cylindrical form of their horns the serows are similar to some of the antelopes but in their clumsy build, heavy limbs and stout hoofs as well as in habits they resemble goats. The serow has a long, melancholy-looking face and because of its enormous ears the Chinese in Fukien Province refer to it as the "wild donkey" but in Yün-nan it is called "wild cow."

The specific relationships of the serows are by no means satisfactorily determined. Mr. Pocock, Superintendent of the London Zoölogical Society's Gardens, has recently devoted considerable study to the serows of British India and considers them all to be races of the single species *Capricornis sumatrensis*. With this opinion I am inclined to agree, although I have not yet had sufficient time in which to thoroughly study the subject in the light of our new material.

These animals differ most strikingly in external coloration, and fall into three groups all of which partake more or less of the characters of each other. Chinese serows usually have the lower legs rusty red, while in Indian races they are whitish, and black in the southern Burma and Malayan forms.

The serows which we killed upon the Snow Mountain can probably be referred to *Capricornis sumatrensis milne-edwardsi*, those of Fukien obtained by Mr. Caldwell represent the white-maned serow *Capricornis sumatrensis argyrochaetes* and one which I shot in May, 1917, near Teng-yueh, not far from the Burma frontier, is apparently an undescribed form.

Our specimens have brought out the fact that a remarkable individual variation exists in the color of the

legs of these animals; this character was considered to be of diagnostic value, and probably is in some degree, but it is by no means as reliable as it was formerly supposed to be.

Two of the serows killed on the Snow Mountain have the lower legs rusty red, while in two others these parts are buff colored. The animals, all males of nearly the same age, were taken on the same mountain, and virtually at the same time. Their skulls exhibit no important differences and there is no reason to believe that they represent anything but an extreme individual variation.

The two specimens obtained by Mr. Caldwell at Yenping are even more surprising. The old female is coal black, but the young male is distinctly brownish-black with a chestnut stripe from the mane to the tail along the mid-dorsal line where the hairs of the back form a ridge. The horns of the female are nearly parallel for half their extent and approach each other at the tips; their surfaces are remarkably smooth. The horns of the young male diverge like a V from the skull and are very heavily ridged. The latter character is undoubtedly due to youth.

These serows are an excellent example of the necessity for collecting a large number of specimens from the same locality. Only by this means is it possible to learn how the species is affected by age, sex and individual variation and what are its really important characters. In the case of the gorals, our Expedition obtained at Hui-yao such a splendid series of all ages that we have an unequaled opportunity for intelligent study. Serows are entirely Asian and found in China, Japan, India, Sumatra and the Malay Peninsula.

On the Snow Mountain we found them living singly at altitudes of from 9,000 to 13,000 feet in dense spruce forests, among the cliffs. The animals seemed to be fond of sleeping under overhanging rocks, and we were constantly finding beds which gave evidence of very extensive use. Apparently serows seldom come out into the open, but feed on leaves and grass while in the thickest cover, so that it is almost impossible to kill them without the aid of dogs or beaters.

Sometimes a serow will lead the dogs for three or four miles, and eventually lose them or it may turn at bay and fight the pack after only a short chase; a large serow is almost certain to kill several of the hounds if in a favorable position with a rock wall at its back. The animal can use its strong curved horns with deadly effect for it is remarkably agile for a beast of its size.

In Fukien we hunted serows on the summit of a high mountain clothed with a dense jungle of dwarf bamboo. It was in quite different country from that which the animals inhabit in Yün-nan for although the cover was exceedingly thick it was without such high cliffs and there were extensive grassy meadows. We did not see any serows in Fukien because of the ignorance of our beaters, although the trails were cut by fresh tracks. The natives said that in late September the animals could often be found in the forests of the lower mountain slopes when they came to browse upon the new grown mushrooms.

Mr. Caldwell purchased for us in the market the skin of a splendid female serow and a short time later obtained a young male. The latter was seen swimming across the river just below the city wall and was caught alive by the natives. The female weighed three hun-

dred and ten pounds and the male two hundred and ninety pounds.

Serows are rare in captivity and are said to be rather dangerous pets unless tamed when very young. We are reproducing a photograph taken and kindly loaned by Mr. Herbert Lang, of one formerly living in the Berlin Zoölogical Garden; we saw a serow in the Zoological Park at Calcutta and one from Darjeeling is owned by the London Zoölogical Society.

Gorals are pretty little animals of the size of the chamois. The species which we killed on the Snow Mountain can probably be referred to *Nœmorhedus griseus,* but I have not yet had an opportunity to study our specimens carefully. Unlike the serows these gorals have blackish brown tails which from the roots to the end of the hairs measure about 10 inches in length. The horns of both sexes are prominently ridged for the basal half of their length and perfectly smooth distally. The male horns are strongly recurved and are thick and round at the base but narrow rapidly to the tips; the female horns are straighter and more slender. The longest horns in the series which we received measured six inches in length and three and three-quarters inches in circumference at the base. Like the serows, gorals are confined to Asia and are found in northern India, Burma, and China, and northwards through Korea and southern Manchuria.

We hunted gorals with dogs on the Snow Mountain for in this particular region they could be killed in no other way. There was so much cover, even at altitudes of from 12,000 to 15,000 feet and the rocks were so precipitous, that a man might spend a month "still hunting" and never see a goral. They are vicious fight-

ers, and often back up to a cliff where they can keep the dogs at a distance. One of our best hounds while hunting alone, brought a goral to bay and was found dead next day by the hunters with its side ripped open.

On the Snow Mountain we found the animals singly but at Hui-yao, not far from the Burma frontier, where we hunted another species in the spring, they were almost universally in herds of from six to seven or eight. It was at the latter place that we had our best opportunity to observe gorals and learn something of their habits. We were camping on the banks of a branch of the Shwelie River, which had cut a narrow gorge for itself; on one side this was seven or eight hundred feet deep. A herd of about fifty gorals had been living for many years on one of the mountain sides not far from the village, and although they were seen constantly the natives had no weapons with which to kill them; but with our high-power rifles it was possible to shoot across the river at distances of from two hundred to four hundred yards.

We could scan every inch of the hillside through our field glasses and watch the gorals as they moved about quite unconscious of our presence. At this place they were feeding almost exclusively upon the leaves of low bushes and the new grass which had sprung up where the slopes had been partly burned over. We found them browsing from daylight until about nine o'clock, and from four in the afternoon until dark. They would move slowly among the bushes, picking off the new leaves, and usually about the middle of the morning would choose a place where the sun beat in warmly upon the rocks, and go to sleep.

Strangely enough they did not lie down on their sides,

as do many hoofed animals, but doubled their forelegs under them, stretched their necks and hind legs straight out, and rested on their bellies. It was a most uncomfortable looking attitude, and the first time I saw an animal resting thus I thought it had been wounded, but both Mr. Heller and myself saw them repeatedly at other times, and realized that this was their natural position when asleep.

When frightened, like our own mountain sheep or goats, they would run a short distance and stop to look back. This was usually their undoing, for they offered excellent targets as they stood silhouetted against the sky. They were very difficult to see when lying down among the rocks, but our native hunters, who had most extraordinary eyesight, often would discover them when it was almost impossible for me to find them even with the field glasses. We never could be sure that there were no gorals on a mountainside, for they were adepts at hiding, and made use of a bunch of grass or the smallest crevice in a rock to conceal themselves, and did it so completely that they seemed to have vanished from the earth.

Like all sheep and goats, they could climb about where it seemed impossible for any animal to move. I have seen a goral run down the face of a cliff which appeared to be almost perpendicular, and where the dogs dared not venture. As the animal landed on a projecting rock it would bounce off as though made of rubber, and leap eight or ten feet to a narrow ledge which did not seem large enough to support a rabbit.

The ability to travel down such precipitous cliffs is largely due to the animal's foot structure. Professor Henry Fairfield Osborn has investigated this matter in

the mountain goat and as his remarks apply almost equally well to the goral, I cannot do better than quote them here:

> The horny part of the foot surrounds only the extreme front. Behind this crescentic horn is a shallow concavity which gives the horny hoof a chance to get its hold. Both the main digits and the dewclaws terminate in black, rubber-like, rounded and expanded soles, which are of great service in securing a firm footing on the shelving rocks and narrow ledges on which the animal travels with such ease. This sole, Smith states, softens in the spring of the year, when the snow is leaving the ground, a fresh layer of the integument taking its place. The rubber-like balls with which the dewclaws are provided are by no means useless; they project back below the horny part of the hoof, and Mr. Smith has actually observed the young captive goats supporting themselves solely on their dewclaws on the edge of a roof. It is probable that they are similarly used on the rocks and precipices, since on a very narrow ledge they would serve favorably to alter the center of gravity by enabling the limb to be extended somewhat farther forward.[1]

There were certain trails leading over the hill slopes at Hui-yao which the gorals must have used continually, judging by the way in which these were worn. We also found much sign beneath overhanging rocks and on projecting ledges to indicate that these were definite resorts for numbers of the animals. Many which we saw were young or of varying ages running with the herds, and it was interesting to see how perfectly they had mastered the art of self-concealment even when hardly a year old. Although at Hui-yao almost all

[1] "Mountain Goat Hunting with the Camera," by Henry Fairfield Osborn. Reprinted from the tenth *Annual Report of the New York Zoölogical Society,* 1906, pp. 13-14.

were on the east side of the river, they did not seem to be especially averse to water, and several times I watched wounded animals swim across the stream.

Gorals are splendid game animals, for the plucky little brutes inspire the sportsman with admiration, besides leading him over peaks which try his nerve to the utmost, and I number among the happiest hours of my life the wonderful hunts in Yün-nan, far above the clouds, at the edge of the snow.

CHAPTER XVIII

THE "WHITE WATER"

Y. B. A.

October had slipped into November when we left the temple and shifted camp to the other side of the Snow Mountain at the "White Water." It was a brilliant day and the ride up the valley could not have been more beautiful. Crossing the *gangheisa* or "dry sea," a great grassy plain which was evidently a dry lake basin, we followed the trail into the forest and down the side of a deep cañon to a mountain stream where the waters spread themselves in a thin, green veil over a bed of white stones.

We pitched our tents on a broad terrace beside the stream at the edge of the spruce forest. Above us towered the highest peak of the mountain, with a glacier nestling in a basin near its summit, and the snow-covered slopes extending in a glorious shining crescent about our camp. The moon was full, and each night as we sat at dinner before the fire, the ragged peaks turned crimson in the afterglow of the sun, and changed to purest silver at the touch of the white moonlight. We have had many camps in many lands but none more beautiful than the one at the "White Water."

The weather was perfect. Every day the sun shone in a cloudless blue sky and in the morning the ground was frozen hard and covered with snowlike frost, but

the air was marvelously stimulating. We felt that we could be happy at the "White Water" forever, but it did not prove to be as good a hunting ground as that on the other side of the mountain. The Lolos killed a fine serow on the first day and Hotenfa brought in a young goral a short time later, but big game was by no means abundant. At the "White Water" we obtained our first Lady Amherst's pheasant (*Thaumalea amherstiæ*) one of the most remarkable species of a family containing the most beautiful birds of the world. The rainbow colored body and long tail of the male are made more conspicuous by a broad white and green ruff about the neck. The first birds brought alive to England were two males which had been presented to the Countess Amherst after whom the species was named. We found this pheasant inhabiting thick forests where it is by no means easy to discover or shoot. It is fairly abundant in Yün-nan, Eastern Tibet and S'suchuan but its habits are not well known. Although the camp yielded several small mammals new to our collection, we decided to go into Li-chiang to engage a new caravan for our trip across the Yangtze River while Heller remained in camp.

The direct road to Li-chiang was considerably shorter than by way of the Snow Mountain village and at three o'clock in the afternoon our beloved "Temple of the Flowers" was visible on the hilltop overlooking the city. As we rode up the steep ascent we saw a picturesque gathering on the porch and heard the sound of many voices laughing and talking. The beautiful garden-like courtyard was filled with women and children of every age and description, and all the doors from one side of the temple had been removed, leaving a large open

space where huge caldrons were boiling and steaming.

We sat down irresolutely on the inner porch but the young priest was delighted to see us and insisted that we wait until Wu arrived. We were glad that we did not seek other quarters for we were to witness an interesting ceremony, which is most characteristic of Chinese life. It seemed that about five years before a gentleman of Li-chiang had "shuffled off this mortal coil." His soul may have found rest, but "his mortal coil" certainly did not. Unfortunately his family inherited a few hundred dollars several years later and the village "astrologer" informed them that according to the *feng-shui,* or omnipotent spirits of the earth, wind, and water, the situation of the deceased gentleman's grave was ill-chosen and that if they ever hoped to enjoy good fortune again they must dig him up, give the customary feast in his honor and have another burial site chosen.

Every village has a "wise man" who is always called upon to select the resting place of the dead, his remuneration varying from two dollars to two thousand dollars according to the circumstances of the deceased's relatives. The astrologer never will say definitely whether or not the spot will prove a propitious one and if the family later sell any property, receive a legacy, or are known to have obtained money in other ways, the astrologer usually finds that the *feng-shui* do not favor the original place and he will exact another fee for choosing a second grave.

The dead are never buried until the astrologer has named an auspicious day as well as an appropriate site, with the result that unburied coffins are to be seen

in temples, under roadside shelters, in the fields and in the back yards of many houses.

Any interference by foreigners with this custom is liable to bring about dire results as in the case of the rioting in Shanghai in 1898. A number of French residents objected to a temple near by being used to store a score or more of bodies until a convenient time for burial and the result was the death of many people in the fighting which ensued. Mr. Tyler Dennet cites an amusing anecdote regarding the successful handling of the problem by a native mandarin in Yen-ping where we visited Mr. Caldwell:

> The doctor pointed out how dangerous to public health was the presence of these coffins in Yen-ping. The magistrate had a census taken of the coffins above ground in the city and found that they actually numbered sixteen thousand. The city itself is estimated to have only about twenty thousand inhabitants.
>
> It was a difficult problem for the magistrate. He might easily move in such a way as to bring the whole city down about his head. But the Chinese are clever in such situations, perhaps the cleverest people on earth. He finally devised a way out. A proclamation was issued levying a tax of fifty cents on every unburied coffin. The Chinese may be superstitious, but they are even more thrifty. For a few weeks Yen-ping devoted itself to funerals, a thousand a week, and now this little city, one of the most isolated in China, can truly be said to be on the road to health.[1]

There are very few such progressive cities in China, however, and a missionary told us that recently a young child and his grandfather were buried on the same day

[1] "Doctoring China," by Tyler Dennet, *Asia,* February, 1918, p. 114.

The "White Water"

although their deaths had been nearly fifty years apart. The funeral rites are in themselves fairly simple, but it is the great ambition of every Chinese to have his resting place as near as possible to those of his ancestors. That is one of the reasons why they are so loath to emigrate.

We often passed eight or ten coolies staggering under the load of a heavy coffin, transporting a body sometimes a month's journey or more to bury it at the dead man's birthplace. A rooster usually would be fastened to the coffin for, according to the Yün-nan superstition, the spirit of the man enters the bird and is conveyed by it to his home.

There is a strange absence of the fear of death among the Chinese. One often sees large planks of wood stored in a corner of a house and one is told that these are destined to become the coffins of the man's father or mother, even though his parents may at the time be enjoying the most robust health. Indeed, among the poorer classes, a coffin is considered a most fitting gift for a son to present to his father.

We established our camp on the porch of the temple at Li-chiang and from its vantage point could watch the festivities going on about us. The feasting continued until after dark and at daylight the kettles were again steaming to prepare for the second day's celebration.

By ten o'clock the court was crowded and a hour later there came a partial stillness which was broken by a sudden burst of music (?) from Chinese violins and pipes. Going outside we found most of the guests standing about an improvised altar. The foot of the coffin was just visible in the midst of the paper decora-

tions and in front of it were set half a dozen dishes of tempting food. These were meant as an offering to the spirit of the departed one, but we knew this would not prevent the sorrowing relatives from eating the food with much relish later on.

In a few moments a group of women approached, supporting a figure clothed in white with a hood drawn over her face. She was bent nearly to the ground and muffled shrieks and wails came from the depths of her veil as she prostrated herself in front of the altar. For more than an hour this chief mourner, the wife of the deceased, lay on her face, her whole figure shaking with what seemed the most uncontrollable anguish. This same lady, however, moved about later among her guests an amiable hostess, with beaming countenance, the gayest of the gay. But every morning while the festivities lasted, promptly at eleven o'clock she would prostrate herself before the coffin and display heartrending grief in the presence of the unmoved spectators in order to satisfy the demands of "custom."

Custom and precedent have grown to be divinities with the Chinese, and such a display of feigned emotion is required on certain prescribed occasions. As one missionary aptly described it "the Chinese are all face and no heart." Mr. Caldwell told us that one night while passing down a deserted street in a Chinese village he was startled to hear the most piercing shrieks issuing from a house nearby. Thinking someone was being murdered, he rushed through the courtyard only to find that a girl who was to be married the following day, according to Chinese custom, was displaying the most desperate anguish at the prospect of leaving her

family, even though she probably was enchanted with the idea.

On the third day of the celebration in the temple at Li-chiang the feasting ended in a burst of splendor. From one o'clock until far past sundown the friends and relatives of the departed one were fed. Any person could receive an invitation by bringing a small present, even if it were only a bowl of rice or a few hundred cash (ten or fifteen cents).

All during the morning girls and women flocked up the hill with trays of gifts. There were many Mosos and other tribesmen among them as well as Chinese. The Moso girls wore their black hair cut short on the sides and hanging in long narrow plaits down their backs. They wore white leather capes (at least that was the original shade) and pretty ornaments of silver and coral at their throats, and as they were young and gay with glowing red cheeks and laughing eyes they were decidedly attractive. The guests were seated in groups of six on the stones of the temple courtyard. Small boys acted as waiters, passing about steaming bowls of vegetables and huge straw platters heaped high with rice. As soon as each guest had stuffed himself to satisfaction he relinquished his place to someone else and the food was passed again. We were frequently pressed to eat with them and in the evening when the last guest had departed the "chief mourner" brought us some delicious fruit candied in black sugar. She told Wu that they had fed three hundred people during the day and we could well believe it. The next morning the coffin was carried down the hill to the accompaniment of anguished wails and we were left once more to the peace and quiet of our beautiful temple courtyard.

Sometimes a family will plunge itself into debt for generations to come to provide a suitable funeral for one of its members, because to bury the dead without the proper display would not only be to "lose face" but subject them to the possible persecution of the angered spirits. This is only one of the pernicious results of ancestor worship and it is safe to say that most of the evils in China's social order today can be traced, directly or indirectly, to this unfortunate practice.

A man's chief concern is to leave male descendants to worship at his grave and appease his spirit. The more sons, grandsons, and great-grandsons who walk in his funeral procession, the more he is to be envied. As a missionary humorously says "the only law of God that ever has been obeyed in China is to be fruitful and multiply." Craving for progeny has brought into existence thousands upon thousands of human beings who exist on the very brink of starvation. Nowhere in the civilized world is there a more sordid and desperate struggle to maintain life or a more hopeless poverty. But fear and self-love oblige them to continue their blind breeding. The apparent atrophy of the entire race is due to ancestor worship which binds it with chains of iron to its dead and to its past, and not until these bonds are severed can China expect to take her place among the progressive nations of the earth.

CHAPTER XIX

ACROSS THE YANGTZE GORGE

In mid-November we left the White Water with a caravan of twenty-six mules and horses. Following the road from Li-chiang to the Yangtze, we crossed the "Black Water" and climbed steadily upward over several tremendous wooded ridges, each higher than the last, to the summit of the divide.

The descent was gradual through a magnificent pine and spruce forest. Some of the trees were at least one hundred and fifty feet high, and were draped with beautiful gray moss which had looped itself from branch to branch and hung suspended in delicate streamers yards in length. The forest was choked with underbrush and a dense growth of dwarf bamboo, and the hundreds of fallen logs, carpeted with bronze moss, made ideal conditions for small mammal collecting. However, as all the species would probably be similar to those we had obtained on the Snow Mountain, we did not feel that it was worth while stopping to trap.

At four-thirty in the afternoon we camped upon a beautiful hill in a pine forest which was absolutely devoid of underbrush, and where the floor was thinly overlaid with brown pine needles. Although the Moso hunter, who acted as our guide, assured us that the river was only three miles away, it proved to be more than fifteen, and we did not reach the ferry until half past one the next afternoon.

We were continually annoyed, as every traveler in China is, by the inaccuracy of the natives, and especially of the Chinese. Their ideas of distance are most extraordinary. One may ask a Chinaman how far it is to a certain village and he will blandly reply, "Fifteen *li* to go, but thirty *li* when you come back." After a short experience one learns how to interpret such an answer, for it means that when going the road is down hill and that the return uphill will require double the time.

Caravans are supposed to travel ten *li* an hour, although they seldom do more than eight, and all calculations of distance are based upon time so far as the *mafus* are concerned. If the day's march is eight hours you invariably will be informed that the distance is eighty *li,* although in reality it may not be half as great.

In "Chinese Characteristics," Dr. Arthur H. Smith gives many illuminating observations on the inaccuracy of the Chinese. In regard to distance he says:

> It is always necessary in land travel to ascertain, when the distance is given in "miles" (*li*), whether the "miles" are "large" or not! That there is *some* basis for estimates of distances we do not deny, but what we do deny is that these estimates or measurements are either accurate or uniform.
>
> It is, so far as we know, a universal experience that the moment one leaves a great imperial highway the "miles" become "long." If 120 *li* constitute a fair day's journey on the main road, then on country roads it will take fully as long to go 100 *li,* and in the mountains the whole day will be spent in getting over 80 *li* (p. 51).

In like manner, a farmer who is asked the weight of one of his oxen gives a figure which seems much too low, until he ex-

plains that he has omitted to estimate the bones! A servant who was asked his height mentioned a measure which was ridiculously inadequate to cover his length, and upon being questioned admitted that he had left out of account all above his shoulders! He had once been a soldier, where the height of the men's clavicle is important in assigning the carrying of burdens. And since a Chinese soldier is to all practical purposes complete without his head, this was omitted.

Of a different sort was the measurement of a rustic who affirmed that he lived "ninety *li* from the city," but upon cross-examination he consented to an abatement, as this was reckoning both to the city and back, the real distance being as he admitted, only "forty-five *li* one way!" (p. 49) . . .

The habit of reckoning by "tens" is deep-seated, and leads to much vagueness. A few people are "ten or twenty," a "few tens," or perhaps "ever so many tens," and a strictly accurate enumeration is one of the rarest of experiences in China. . . . An acquaintance told the writer that two men had spent "200 strings of cash" on a theatrical exhibition, adding a moment later, "It was 173 strings, but that is the same as 200—is it not?" (p. 54).

A man who wished advice in a lawsuit told the writer that he himself "lived" in a particular village, though it was obvious from his narrative that his abode was in the suburbs of a city. Upon inquiry, he admitted that he did not *now* live in the village, and further investigation revealed the fact that the removal took place nineteen generations ago! "But do you not almost consider yourself a resident of the city now?" he was asked. "Yes," he replied simply, "we do live there now, but the old root is in that village."

. . . The whole Chinese system of thinking is based on a line of assumptions different from those to which we are accustomed, and they can ill comprehend the mania which seems to possess the Occidental to ascertain everything with unerring exactness. The Chinese does not know how many families there

are in his native village, and he does not wish to know. What any human being can want to know this number for is to him an insoluble riddle. It is "a few hundred," "several hundreds," or "not a few," but a fixed and definite number it never was and never will be. (p. 55.)

After breaking camp on the day following our departure from the "White Water" we rode along a broad trail through a beautiful pine forest and in the late morning stood on an open summit gazing on one of the most impressive sights which China has to offer. At the left, and a thousand feet below, the mighty Yangtze has broken through the mountains in a gorge almost a mile deep; a gorge which seems to have been carved out of the solid rock, sharp and clean, with a giant's knife. A few miles to the right the mountains widen, leaving a flat plain two hundred feet above the river. Every inch of it, as well as the finger-like valleys which stretch upward between the hills, is under cultivation, giving support for three villages, the largest of which is Taku.

The ferry is in a bad place but it is the only spot for miles where the river can be crossed. The south bank is so precipitous that the trail from the plain twists and turns like a snake before it emerges upon a narrow sand and gravel beach. The opposite side of the river is a vertical wall of rock which slopes back a little at the lower end to form a steep hillside covered with short grass. The landing place is a mass of jagged rocks fronting a small patch of still water and the trail up the face of the cliff is so steep that it cannot be climbed by any loaded animal; therefore all the packs must be unstrapped and laboriously carted up the slope on the backs of the *mafus*.

At two-thirty in the afternoon we were loading the boat, which carried only two animals and their packs, for the first trip across the river. It was difficult to get the mules aboard for they had to be whipped, shoved and actually lifted bodily into the dory. One of the ferrymen first drew the craft along the rocks by a long rope, then climbed up the face of what appeared to be an absolutely flat wall, and after pulling the boat close beneath him, slid down into it. In this way the dory was worked well up stream and when pushed into the swift current was rowed diagonally to the other side.

After four loads had been taken over, the boatmen decided to stop work although there was yet more than an hour of daylight and they could not be persuaded to cross again by either threats or coaxing. It was an uncomfortable situation but there was nothing to do but camp where we were even though the greater part of our baggage was on the other side, with only the *mafus* to guard it, and therefore open to robbery.

About a third of a mile from the ferry we found a sandy cornfield on a level shelf just above the water, and pitched our tents. A slight wind was blowing and before long we had sand in our shoes, sand in our beds, sand in our clothes, and we were eating sand. Heller went down the river with a bag of traps while we set forty on the hills above camp, and after a supper of goral steak, which did much to allay the irritation of the day, we crawled into our sandy beds.

At daylight Hotenfa visited the ferry and reported that the loads were safe but that one of the boatmen had gone to the village and no one knew when he would return. We went to the river with Wu as soon as breakfast was over and spent an aggravating hour try-

ing by alternate threats and cajoling to persuade the remaining ferryman to cross the river to us. But it was useless, for the louder I swore the more frightened he became and he finally retired into a rock cave from which the *mafus* had to drag him out bodily and drive him into the boat.

The second boatman ambled slowly in about ten o'clock and we felt like beating them both, but Wu impressed upon us the necessity for patience if we ever expected to get our caravan across and we swallowed our wrath; nevertheless, we decided not to leave until the loads and mules were on the other side, and we ate a cold tiffin while sitting on the sand.

Heller employed his time by skinning the twenty small mammals (one of which was a new rat) that our traps had yielded. We took a good many photographs and several rolls of "movie" film showing the efforts of the *mafus* to get the mules aboard. Some of them went in quietly enough but others absolutely refused to step into the boat. One of the *mafus* would pull, another push, a third twist the animal's tail and a fourth lift its feet singly over the side. With the accompaniment of yells, kicks, and Chinese oaths the performance was picturesque to say the least.

By five o'clock the entire caravan had been taken across the racing green water and we had some time before dark in which to investigate the caverns with which the cliffs above the river are honeycombed. They were of two kinds, gold quarries and dwelling caves. The latter consist of a long central shaft, just high enough to allow a man to stand erect; this widens into a circular room. Along the sides of the corridor shallow nests have been scooped out to serve as beds and all

A Liso Hunter Carrying a Flying Squirrel

The Chief of our Lolo Hunters

the cooking is done not far from the door. The caves, although almost dark, make fairly comfortable living quarters and are by no means as dirty or as evil smelling as the ordinary native house. The mines are straight shafts dug into the cliffs where the rock is quarried and crushed by hand.

CHAPTER XX

THROUGH UNMAPPED COUNTRY

We left the Taku ferry by way of a steep trail through an open pine and spruce forest along the rim of the Yangtze gorge where the view was magnificent. Someone has said that when a tourist sees the Grand Cañon for the first time he gasps "Indescribable" and then immediately begins to describe it. Thus it was with us, but no words can picture the grandeur of this titanic chasm. In places the rocks were painted in delicate tints of blue and purple; in others, the sides fell away in sheer drops of hundreds of feet to the green torrent below rushing on to the sea two thousand five hundred miles away.

The caravan wound along the edge of the gorge all day and we were left far behind, for at each turn a view more beautiful than the last opened out before us, and until every color plate and negative in the holders had been exposed we worked steadily with the camera.

We were traveling northwestward through an unmapped region which Baron Haendel-Mazzetti had skirted and reported to be one of vast forests and probably rich in game. After six hours of riding over almost bare mountain-sides we passed through a park-like spruce forest and reached Habala, a long thin village of mud and stone houses scattered up the sides of a narrow valley.

Above and to the left of the village rose ridge after ridge of dense spruce forest overshadowed by a snow-crowned peak and cut by deep ravines, the gloomy depths of which yielded fascinating glimpses of rocky cliffs—a veritable paradise for serow and goral. Our camping place was a grassy lawn as flat and smooth as the putting green of a golf course. Just below the tents a streamlet of ice-cold water murmured comfortably to itself and a huge dead tree was lying crushed and broken for the camp fire.

The boys turned the beautiful spot into "home" in half an hour and, after setting a line of traps, we wandered slowly back through the darkness guided by the brilliant flames of the fires which threw a warm yellow glow over our little table spread for dinner.

We sent men to the village to bring in hunters and after dinner four or five picturesque Mosos appeared. They said that there were many serow, goral, muntjac and some wapiti in the forests above the village, and we could well believe it, for there was never a more "likely looking" spot. Although the men did not claim to be professional hunters, nevertheless they said that they had good dogs and had killed many muntjac and other animals.

They agreed to come at daylight and arrived about two hours late, which was doing fairly well for natives. It was a brilliant day just warm enough for comfort in the sun and we left camp with high hopes. However it did not take many hours to demonstrate that the men knew almost nothing about hunting and that their dogs were useless. Because of the dense cover "still hunting" was out of the question and, after a hard climb, we returned to camp to spend the remainder

of the afternoon developing photographs and preparing small mammals.

Our traps had yielded three new shrews and a silver mole as well as a number of mice, rats, and meadow voles of species identical with those taken on the Snow Mountain. It was evident, therefore, that the Yangtze River does not act as an effective barrier to the distribution of even the smallest forms and that the region in which we were now working would not produce a different fauna. This was an important discovery from the standpoint of our distribution records but was also somewhat disappointing.

The photographic work already had yielded excellent results. The Paget color plates were especially beautiful and the fact that everything was developed in the field gave us an opportunity to check the quality of each negative.

For this work the portable dark room was invaluable. It could be quickly erected and suspended from a tree branch or the rafters of a temple and offered an absolutely safe place in which to develop or load plates. The moving-picture film required special treatment because of its size and we usually fastened in the servants' tent the red lining which had been made for this purpose in New York. Even then the space was so cramped that we were dead tired at the end of a few hours' work.

One who sits comfortably in a theater or hall and sees moving-picture film which has been obtained in such remote parts of the world does not realize the difficulties in its preparation. The water for developing almost invariably was dirty and in order to insure even a moderately clear film it always had to be strained.

For washing the negative pailful after pailful had to be carried sometimes from a very long distance, and the film exposed for hours to the carelessness or curiosity of the natives. In our cramped quarters perhaps a corner of the tent would be pushed open admitting a stream of light; the electric flash lamp might refuse to work, leaving us in complete darkness to finish the developing "by guess and by gosh," or any number of other accidents occur to ruin the film. At most we could not develop more than three hundred feet in an afternoon and we never breathed freely until it finally was dried and safely stored away in the tin cans.

We left Habala, on November 23, for a village called Phete where the natives had assured us we would find good hunters with dogs. For almost the entire distance the road skirted the rim of the Yangtze gorge and there the view of the great chasm was even more magnificent than that we had left. While its sides are not fantastically sculptured and the colors are softer than those of the Grand Cañon of the Colorado, nevertheless its grandeur is hardly less imposing and awe-inspiring. If Yün-nan is ever made accessible by railroads this gorge should become a Mecca for tourists, for it is without doubt one of the most remarkable natural sights in the world.

About two o'clock in the afternoon we saw three clusters of houses on a tableland which juts into a chasm cut by a tributary of the great river. One of them was Phete and it seemed that we would reach the village in half an hour at least, but the road wound so tortuously around the hillside, down to the stream and up again that it was an hour and a half before we found a camp-

ing place on a narrow terrace a short distance from the nearest houses.

Next day we could not go to the village to find hunters until mid-forenoon because the natives of this region are very late risers and often have not yet opened their doors at ten o'clock. This is quite contrary to the custom in many other parts of China where the inhabitants are about their work in the first light of dawn.

The hills above Phete are bare or thinly forested and every available inch of level ground is under cultivation with corn and a few rice paddys near the creek; the latter were a great surprise, for we had not expected to find rice so far north. The village itself was exceedingly picturesque but never have we met people of such utter and hopeless stupidity as its inhabitants. They were pleasant enough and always greeted us with a smile and salutation, but their brains seemed not to have kept pace with their bodies and when asked the simplest question they would only stare stupidly without the slightest glimmering of intelligence.

It required an hour's questioning of a dozen or more people to glean that there were no hunters in the village where they had lived all their lives, but Wu, our interpreter, finally discovered a Chinese who told us of a hunter in the mountains. He asked how far and the answer was "Not very far."

"Well, is it ten *li?*"

"I don't know how many *li.*"

"Have you ever been there?"

"Yes; it is only a few steps."

"How long will it take to get there?"

"About the time of one meal."

We were not to be deceived, for we had had experi-

ence with native ideas of distance, and we ate our tiffin before starting out on the "few steps." A steep trail led up the valley and after three hours of steady riding we reached the hunter's village of three large houses on a flat strip of cleared ground in the midst of a dense forest.

The people looked much like those of Phete but were rather anemic specimens, and five out of eight had enormous goiters. They were exceedingly shy at first, watching us with side glances and through cracks in the wall. Wu learned that we were the first white persons they had ever seen. I imagine that much of their unhealthiness was due to too close intermarriage, for these families had little intercourse with the people in Phete who were only "a few steps" away.

As we were leaving they began to eat their supper in the courtyard. The principal dish consisted of mixed cornmeal and rice, boiled squash and green vegetables. All the women were busy husking corn which was hung to dry on great racks about the house. These racks we had noticed in every village since leaving Li-chiang and they seemed to be in universal use in the north.

The hunter had a flock of sheep and we purchased one for $1.40 (Mexican) but there was considerable difficulty in paying for it since these people had never seen Chinese money even though living in China itself. For currency they used chunks of silver the size of a walnut and worth about one dollar (Mexican). The Chinese guide finally persuaded the people of the genuineness of our money and we purchased a few eggs and a little very delicious wild honey besides the sheep. These people as well as those of Phete spoke the Li-chiang dialect but with such variation that even our

mafus could understand them only with the greatest difficulty.

When we returned to camp we found that the coolie who had been engaged to carry the motion-picture camera and tripod had left without the formality of saying "good-by" or asking for the money which was due him. We had had considerable trouble with the camera coolies since leaving Li-chiang. The first one carried the camera to the Taku ferry with many groans, and there engaged a huge Chinaman to take his place, for he thought the load too heavy. It only weighed fifty pounds, and in the Fukien Province where men seldom carry less than eighty pounds and sometimes as much as one hundred and fifty, it would have been considered as only half a burden. In Yün-nan, however, animals do most of the pack carrying, and coolies protest at even an ordinary load.

We left Phete in the early morning and camped about five hundred feet above the hunter's cabin in a beautiful little meadow. It was surrounded with splendid pine trees, and a clear spring bubbled up from a knoll in the center and spread fan-shaped in a dozen little streams over the edge of a deep ravine where a mountain torrent rushed through a tangled bamboo jungle. The gigantic fallen trees were covered inches deep with green moss, and altogether it was an ideal spot for small mammals. Our traps, however, yielded no new species, although we secured dozens of specimens every night.

There were a few families of Lolos about two miles away and these were engaged as hunters. They told us that serow and muntjac were abundant and that wapiti were sometimes found on the mountains several

miles to the northward. Although the men had a large pack of good dogs they were such unsatisfactory hunters that we gave up in disgust after three days. They never would appear until ten or eleven o'clock in the morning when the sun had so dried the leaves that the scent was lost and the dogs could not follow a trail even if one were found. Moreover, the camp was a very uncomfortable one, due to the wind which roared through the trees night and day.

We were rejoined here by Hotenfa, who had left us at the Taku ferry to see if he could get together a pack of dogs. He brought three hounds with him which he praised exuberantly, but we subsequently found that they did not justify our hopes. Nevertheless, we were glad to have Hotenfa back, for he was one of the most intelligent, faithful, and altogether charming natives whom we met in all Yün-nan. He was an uncouth savage when he first came to us, but in a very short time he had learned our camp ways and was as good a servant as any we had.

CHAPTER XXI

TRAVELING TOWARD TIBET

Since the hunters at the "Windy Camp" had proved so worthless and the traps had yielded no small mammals new to our collection, we decided to cross the mountains toward the Chung-tien road which leads into Tibet.

The head *mafu* explored the trail and reported that it was impassable but, after an examination of some of the worst barriers, we decided that they could be cleared away and ordered the caravan to start at half past seven in the morning.

Before long we found that the *mafus* were right. The trail was a mass of tangled underbrush and fallen logs and led straight up a precipitous mountain through a veritable jungle of dwarf bamboo. It was necessary to stop every few yards to lift the loads over a barrier or cut a passage through the bamboo thickets, and had it not been for the adjustable pack saddles we never could have taken the caravan over the trail.

Late in the afternoon the exhausted men and animals dragged themselves to the summit of the mountain, for it was not a pass. In a few hours we had come from autumn to mid-winter where the ground was frozen and covered with snow. We were at an altitude of more than 15,000 feet and far above all timber except the rhododendron forest which spread itself out in a low gray mass along the ridges. It was difficult to make

the slightest exertion in the thin air and a bitterly cold wind swept across the peaks so that it was impossible to keep warm even when wrapped in our heaviest coats.

The servants and *mafus* suffered considerably but it was too late to go on and there was no alternative but to spend the night on the mountain. As soon as the tents were up the men huddled disconsolately about the fire, but we started out with a bag of traps while Heller went in the opposite direction. We expected to catch some new mammals during the night, for there were great numbers of runways on the bare hillsides. The ground was frozen so solidly that it was necessary to cut into the little *Microtus* tunnels with a hatchet in order to set the traps and we were almost frozen before the work was completed. The next morning we had caught twenty specimens of a new white-bellied meadow vole and a remarkable shrew with a long curved proboscis.

Everyone had spent an uncomfortable night, for it was bitterly cold even in our sleeping bags and the men had sat up about the fire in order to keep from freezing. There was little difficulty in getting the caravan started in the gray light of early dawn and after descending abruptly four thousand feet on a precipitous trail to a Lolo village strung out along a beautiful little valley we were again in the pleasant warmth of late autumn.

The natives here had never before seen a white person and in a few moments our tents were surrounded by a crowd of strange-looking men and boys. The chief of the village presented us with an enormous rooster and we made him happy by returning two tins of cigarettes. The Lolo women, the first we had seen, were especially surprising because of their graceful figures

and handsome faces. Their flat turbans, short jackets, and long skirts with huge flounces gave them a rather old-fashioned aspect, quite out of harmony with the metal neck-bands, earrings, and bracelets which they all wore.

The men were exceedingly pleasant and made a picturesque group in their gray and brown felt capes which they gather about the neck by a draw string and, to the Lolos and Mosos alike, are both bed and clothing. We collected all the men for their photographs, and although they had not the slightest idea what we were about they stood quietly after Hotenfa had assured them that the strange-looking instrument would not go off. But most interesting of all was their astonishment when half an hour later they saw the negative and were able to identify themselves upon it.

The Lolos are apparently a much maligned race. They are exceedingly independent, and although along the frontier of their own territory in S'suchuan they wage a war of robbery and destruction it is not wholly unprovoked. No one can enter their country safely unless he is under the protection of a chief who acts as a sponsor and passes him along to others. Mr. Brooke, an Englishman, was killed by the Lolos, but he was not properly "chaperoned," and Major D'Ollone of the French expedition lived among them safely for some time and gives them unstinted praise.

Whenever we met tribesmen in Yün-nan who had not seen white persons they behaved much like all other natives. They were, of course, always greatly astonished to see our caravan descend upon them and were invariably fascinated by our guns, tents, and in fact everything about us, but were generally shy and de-

A Lolo Village

Lolos Seeing Their Photographs for the First Time

cidedly less offensive in their curiosity than the Chinese of the larger inland towns to whom foreigners are by no means unknown. As a matter of fact we have found that our white skins, light eyes, and hair are a never failing source of interest and envy to almost all Orientals.

Yvette usually excited the most curiosity, especially among the women, and as she wore knickerbockers and a flannel shirt there were times when the determination of her sex seemed to call forth the liveliest discussion. Her long hair, however, usually settled the matter, and when the women had decided the question of gender satisfactorily they often made timid, and most amusing, advances. One woman said she greatly admired her fair complexion and asked how many baths she took to keep her skin so white. Another wondered whether it was necessary to ever comb her hair and almost everyone wished to feel her clothes and shoes. She always could command more attention than anyone else by her camera operations, and a group would stand in speechless amazement to see her dodge in and out of the portable dark room when she was developing photographs or loading plates.

We made arrangements to go with a number of the Lolos to a spot fifteen miles away on the Chung-tien road to hunt wapiti (probably *Cervus macneilli*) which the natives call *maloo*. Our American wapiti, or elk, is a migrant from Asia by way of the Bering Strait and is probably a relative of the wapiti which is found in Central Asia, China, Manchuria and Korea.

At present these deer are abundant in but few places. Throughout the Orient, and especially in China, the growing horns when they are soft, or in the "velvet,"

are considered of great medicinal value and, during the summer, the animals are trapped and hunted relentlessly by the natives. In Yün-nan, when we were there, a pair of horns were worth $100 (Mexican).

Thanksgiving morning dawned gray and raw with occasional flurries of haillike snow, but we did not heed the cold, for the trail led over two high ridges and along the rim of a tremendous gorge. To the south the white summits of the Snow Mountain range towered majestically above the surrounding peaks and, in the gray light, the colors were beautiful beyond description. To the north we could see heavily wooded mountain slopes interspersed with open parklike meadows—splendid wapiti country.

Our tents were pitched two hundred yards from the Chung-tien road just within the edge of a stately, moss-draped forest. That night we celebrated with harmless bombs from the huge fires of bamboo stalks which exploded as they filled with steam and echoed among the trees like pistol shots. Marco Polo speaks of the same phenomenon which he first witnessed in this region over six hundred and thirty years ago.

About nine o'clock in the evening we ran our traps with a lantern and besides several mice (*Apodemus*) found two rare shrews and a new mole (*Blarina*). I went out with the hunters at dawn but saw nothing except an old wapiti track and a little sign. All during the following day a dense fog hung close to the ground so that it was impossible to hunt, and, on the night of December 2, it snowed heavily. The morning began bright and clear but clouded about ten o'clock and became so bitterly cold that the Lolos would not hunt. They really suffered considerably and that night they

all left us to return to their homes. We were greatly disappointed, for we had brilliant prospects of good wapiti shooting but without either men or dogs and in an unknown country there was little possibility of successful still hunting.

The *mafus* were very much worried and refused to go further north. They were certain that we would not be able to cross the high passes which lay between us and the Mekong valley far to the westward and complained unceasingly about the freezing cold and the lack of food for their animals. It was necessary to visit the Mekong River, for even though it might not be a good big game region it would give us a cross-section, as it were, of the fauna and important data on the distribution of small mammals. Therefore we decided to leave for the long ride as soon as the weather permitted.

CHAPTER XXII

STALKING TIBETANS WITH A CAMERA

Y. B. A.

THE road near which we were camped was one of the great trade routes into Tibet and over it caravans were continually passing laden with tea or pork. Many of them had traveled the entire length of Yün-nan to S'su-mao on the Tonking frontier where a special kind of tea is grown, and were hurrying northward to cross the snow-covered passes which form the gateways to the "Forbidden Land."

The caravans sometimes stopped for luncheon or to spend the night near our camp. As the horses came up, one by one the loads were lifted off, the animals turned loose, and after their dinner of buttered tea and *tsamba*[1] each man stretched out upon the ground without shelter of any kind and heedless of the freezing cold. It is truly the life of primitive man and has bred a hardy, restless, independent race, content to wander over the boundless steppes and demanding from the outside world only to be let alone.

They are picturesque, wild-looking fellows, and in their swinging walk there is a care-free independence and an atmosphere of the bleak Tibetan steppes which are strangely fascinating. Every Tibetan is a study for an artist. He wears a fur cap and a long loose coat

[1] *Tsamba* is parched oats or barley, ground finely.

like a Russian blouse thrown carelessly off one shoulder and tied about the waist, blue or red trousers, and high boots of felt or skin reaching almost to the knees. A long sword, its hilt inlaid with bright-colored bits of glass or stones, is half concealed beneath his coat, and he is seldom without a gun or a murderous looking spear.

In the breast of his loose coat, which acts as a pocket, he carries a remarkable assortment of things; a pipe, tobacco, tea, *tsamba,* cooking pots, a snuff box and, hanging down in front, a metal charm to protect him from bullets or sickness.

The eastern Tibetans are men of splendid physique and great strength, and are frequently more than six feet in height. They have brick-red complexions and some are really handsome in a full-blooded masculine way. Their straight features suggest a strong mixture of other than Mongolian stock and they are the direct antithesis of the Chinese in every particular. Their strength and virility and the dashing swing of their walk are very refreshing after contact with the ease-loving, effeminate Chinaman whom one sees being carried along the road sprawled in a mountain chair.

Of all natives whom we tried to photograph the Tibetans were the most difficult. It was almost impossible to bribe them with money or tin cans to stand for a moment and when they saw the motion picture camera set up beside the trail they would make long detours to avoid passing in front of it.

What we could not get by bribery we tried to do by stealth and concealed ourselves behind bushes with the camera focused on a certain spot upon the road. The instant a Tibetan discovered it he would run like a

frightened deer and in some mysterious way they seemed to have passed the word along that our camp was a spot to be avoided. Sometimes a bottle was too great a temptation to be resisted, and one would stand timidly like a bird with wings half spread, only to dash away as though the devil were after him, when he saw my head disappear beneath the focusing hood.

Wu and a *mafu* who could speak a little Tibetan finally captured one picturesque looking fellow. He carefully tucked the tin cans, given for advance payment, inside his coat, and with a great show of bravery allowed me to place him where I wished. But the instant the motion picture camera swung in his direction he dodged aside, and jumped behind it. Wu tried to hold him but the Tibetan drew his sword, waved it wildly about his head and took to his heels, yelling at the top of his lungs. He was well-nigh frightened to death and when he disappeared from sight at a curve in the road he was still "going strong" with his coat tails flapping like a sail in the wind.

One caravan came suddenly upon the motion picture camera unawares. There were several women in the party and, as soon as the men realized that there was no escape, each one dodged behind a woman, keeping her between him and the camera. They were taking no chances with their precious selves, for the women could be replaced easily enough if necessary.

The trouble is that the Tibetan not unnaturally has the greatest possible suspicion and dislike for strangers. The Chinese he loathes and despises, and foreigners he knows only too well are symptoms of missionaries and punitive expeditions or other disturbances of his immemorial peace. He is confirmed in his attitude by the

Travelers in the Mekong Valley

Two Tibetans

Church which throughout Tibet has the monopoly of all the gold in the country. And the Church utterly declines to believe that any foreigner can come so far for any end less foolish than the discovery of gold and the infringing of the ecclesiastical monopoly.

Major Davies, who saw much of the Yün-nan Tibetans, has remarked that it is curious how little impression the civilization and customs of the Chinese have produced on the Tibetans. Elsewhere, one of the principal characteristics of Chinese expansion is its power of absorbing other races, but with the Tibetans exactly the reverse takes place. The Chinese become Tibetanized and the children of a Chinaman married to a Tibetan woman are usually brought up in the Tibetan customs.

Probably the great cause which keeps the Tibetan from being absorbed is the cold, inhospitable nature of his country. There is little to tempt the Chinese to emigrate into Tibet and consequently they never are there in sufficient numbers to influence the Tibetans around them. A similar cause has preserved some of the low-lying Shan states from absorption, the heat in this case being the reason that the Chinese do not settle there.

CHAPTER XXIII

WESTWARD TO THE MEKONG RIVER

During the night of December 4, there was a heavy fall of snow and in the morning we awoke to find ourselves in fairyland. We were living in a great white palace, with ceiling and walls of filmy glittering webs. The long, delicate strands of gray moss which draped themselves from tree to tree and branch to branch were each one converted into threads of crystal, forming a filigree lacework, infinitely beautiful.

It was hard to break camp and leave that silver palace, for every vista through the forest seemed more lovely than the one before, but we knew that another fall of snow would block the passes and shut us out from the Mekong valley. The *mafus* even refused to try the direct route across the mountains to Wei-hsi and insisted on going southward to the Shih-ku ferry and up the Yangtze River on the main caravan route.

It was a long trip and we looked forward with no pleasure to eight days of hard riding. The difficulty in obtaining hunters since leaving the Snow Mountain had made our big game collecting negligible although we had traveled through some excellent country. The Mekong valley might not be better but it was an unknown quantity and, whether or not it yielded specimens, the results from a survey of the mammal distribution would be none the less important, and we felt that

it must be done; otherwise we should have turned our backs on the north and returned to Ta-li Fu.

As we rode down the mountain trail we passed caravan after caravan of Tibetans with heavily loaded horses, all bound for that land of mystery beyond the snow-capped barriers. Often we tried to stop some of the red-skinned natives and persuade them to pose for a color photograph, but usually they only shook their heads stubbornly and hurried past with averted faces. We finally waylaid a Chinese and a Tibetan who were walking together. The Chinaman was an amiable fellow and by giving each of them a glass jam tumbler they halted a moment. As soon as the photograph had been taken the Chinese indicated that he expected us to produce one and was thoroughly disgusted when we showed him that it was impossible.

Repassing the Lolo village, we followed the river gorge at the upper end of which Chung-tien is located and left the forests when we emerged on the main road. From the top of a ten thousand foot pass there was a magnificent view down the cañon to the snow-capped mountains, which were beautiful beyond description in their changing colors of purple and gold.

Just after leaving the pass we met a caravan of several hundred horses each bearing two whole pigs bent double and tied to the saddles. The animals had been denuded of hair, salted, and sewn up, and soon would be distributed among the villages somewhere in the interior of Tibet.

On the second day we saw before us seven snow-crowned peaks as sharp and regular as the teeth of a saw rising above the mouth of the stream where it spreads like a fan over a sandy delta and empties into

the Yangtze. Here the mighty river, flowing proudly southward from its home in the wind-blown steppes of the "Forbidden Land," countless ages ago found the great Snow Mountain range barring its path. Thrust aside, it doubled back upon itself along the barrier's base, still restlessly seeking a passage through the wall of rock. Far to the north it bit hungrily into the mountain's side again, broke through, and swung south gathering strength and volume from hundreds of tributaries as it rushed onward to the sea.

For two days we rode along the river bank and crossed at the Shih-ku ferry. There was none of the difficulty here which we had experienced at Taku, for the river is wide and the current slow. It required only two hours to transport our entire caravan while at the other ferry we had waited a day and a half. Strangely enough, although there are dozens of villages along the Yangtze and the valley is highly cultivated, we saw no sign of fishing. Moreover, we passed but three boats and five or six rafts and it was evident that this great waterway, which for fifteen hundred miles from its mouth influences the trade of China so profoundly, is here used but little by the natives.

On the ride down the river we had good sport with the huge cranes (probably *Grus nigricollis*) which, in small flocks, were feeding along the river fields. The birds stood about five feet high and we could see their great black and white bodies and black necks farther than a man was visible. It was fairly easy to stalk them to within a hundred yards, but even at that distance they offered a rather small target, for they were so largely wings, neck, legs, and tail. We were never within shotgun range and indeed it would be difficult to kill the

The Gorge of the Yangtze River

birds with anything smaller than BB or buckshot unless they were very near.

Heller shot our first cranes with his .250-.300 Savage rifle. He stole upon five which were feeding in a meadow and fired while two were "lined up." One of the huge birds flapped about on the ground for a few moments and lay still, but the larger was only wing-tipped and started off at full speed across the fields. Two *mafus* left the caravan, yelling with excitement, and ran for nearly half a mile before they overtook the bird. Then they were kept at bay for fifteen minutes by its long beak which is a really formidable weapon. As food the cranes were perfectly delicious when stuffed with chestnut dressing and roasted. Each one provided two meals for three of us with enough left over for hash and our appetites were by no means birdlike.

Although the natives attempt to kill cranes they are not often successful, for the birds are very watchful and will not allow a man within a hundred yards. Such a distance for primitive guns or crossbows might as well be a hundred miles, but with our high-power rifles we were able to shoot as many as were needed for food.

The birds almost invariably followed the river when flying and fed in the rice, barley, and corn fields not far from the water. It was an inspiring sight to see a flock of the huge birds run for a few steps along the ground and then launch themselves into the air, their black and white wings flashing in the sunlight. They formed into orderly ranks like a company of soldiers or strung out in a long thin line across the sky.

When we disturbed a flock from especially desirable feeding grounds they would sometimes whirl and circle above the fields, ascending higher and higher in great

spirals until they were lost to sight, their musical voices coming faintly down to us like the distant shouts of happy children.

When we returned to Ta-li Fu in early January, cranes were very abundant in the fields about the lake. They had arrived in late October and would depart in early spring, according to Mr. Evans. We often saw the birds on sand banks along the Yangtze, but they were usually resting or quietly walking about and were not feeding; apparently they eat only rice, barley, corn, or other grain.

This species was discovered by the great traveler and naturalist, Lieutenant Colonel Prjevalsky, who found it in the Koko-nor region of Tibet, and it was later recorded by Prince Henri d'Orleans from Tsang in the Tibetan highlands. Apparently specimens from Yün-nan have not been preserved in museums and the bird was not known to occur in this portion of China.

Along the Yangtze on our way westward we shot a good many mallard ducks (*Anas boscas*) and ruddy sheldrakes (*Casarca casarca*); the latter are universally known as "brahminy ducks" by the foreigners in Burma and Yün-nan, but they are not true ducks. The name is derived from the bird's beautiful buff and rufous color which is somewhat like that of the robes worn by the Brahmin priests. In America the name "sheldrake" is applied erroneously to the fish-eating mergansers, and much confusion has thus arisen, for the two are quite unrelated and belong to perfectly distinct groups. The mergansers have narrow, hooked, saw-toothed beaks quite unlike those of the sheldrakes, and their habits are entirely dissimilar.

The brahminy ducks, although rather tough, are not

bad eating. We usually found them feeding in fields not far from the river or in flooded rice dykes, and very often sitting in pairs on the sand banks near the water. They have a bisyllabic rather plaintive note which is peculiarly fascinating to me and, like the honk of the Canada goose, awakens memories of sodden, wind-blown marshes, bobbing decoys, and a leaden sky shot through with V-shaped lines of flying birds.

Mallards were frequently to be found with the sheldrakes, and we had good shooting along the river and in ponds and rice fields. We also saw a few teal but they were by no means abundant. Pheasants were scarce. We shot a few along the road and near some of our camps, but we found no place in Yün-nan where one could have even a fair day's shooting without the aid of a good dog. This is strikingly different from Korea where in a walk over the hillsides a dozen or more pheasants can be flushed within an hour.

After two and one-half days' travel up the Yangtze we turned westward toward Wei-hsi and camped on a beautiful flat plain beside a tree-bordered stream. It was a cold clear night and after dinner and a smoke about the fire we all turned in.

Both of us were asleep when suddenly a perfect bedlam of angry exclamations and Chinese curses roused the whole camp. In a few moments Wu came to our tent, almost speechless with rage and stammered, "Damn fool soldiers come try to take our horses; say if *mafu* no give them horses they untie loads. Shall I tell *mafu* break their heads?" We did not entirely understand the situation but it seemed quite proper to give the *mafus* permission to do the head-breaking, and they

went at it with a will. After a volley of blows, there was a scamper of feet on the frozen ground and the soldiers retired considerably the worse for wear.

When the battle was over, Wu explained matters more fully. It appeared that a large detachment of soldiers had recently passed up this road to A-tun-tzu and four or five had remained behind to attend to the transport of certain supplies. Seeing an opportunity for "graft" the soldiers were stopping every caravan which passed and threatening to commandeer it unless the *mafus* gave a sufficient bribe to buy their immunity. Our *mafus,* with the protection which foreigners gave them, had paid off a few old scores with interest. That they had neglected no part of the reckoning was quite evident when next morning two of the soldiers came to apologize for their "mistake." One of them had a black and swollen eye and the other was nursing a deep cut on his forehead; they were exceedingly humble and did not venture into camp until they had been assured that we would not again loose our terrible *mafus* upon them.

Such extortions are every day occurrences in many parts of China and it is little wonder that the military is cordially hated and feared by the peasants. The soldiers, taking advantage of their uniform, oppress the villagers in numberless ways from which there is no redress. If a complaint is made a dozen soldiers stand ready to swear that the offense was justified or was never committed, and the poor farmer is lucky if he escapes without a beating or some more severe punishment. It is a disgrace to China that such conditions are allowed to exist, and it is to be hoped that ere many

years have passed the country will awake to a proper recognition of the rights of the individual. Until she does there never can be a national spirit of patriotism in China and without patriotism the Republic can be one in name only.

CHAPTER XXIV

DOWN THE MEKONG VALLEY

On December 11, we had tiffin on the summit of a twelve thousand foot pass in a beautiful snow-covered meadow, from which we could see the glistening peaks of the vast mountain range which forms the Mekong-Salween divide. In the afternoon we reached Wei-hsi and camped in a grove of splendid pine trees on a hill overlooking the city. The place was rather disappointing after Li-chiang. The shops were poor and it was difficult to buy rice even though the entire valley was devoted to paddy fields, but we did get quantities of delicious persimmons.

Wu told us that seven different languages were spoken in the city, and we could well believe it, for we recognized Mosos, Lolos, Chinese, and Tibetans. This region is nearly the extreme western limit of the Moso tribe which appears not to extend across the Mekong River.

The mandarin at Wei-hsi received us hospitably and proved to be one of the most courteous officials whom we met in Yün-nan. We were sorry to learn that he was killed in a horrible way only a few weeks after our visit. Trouble arose with the peasants over the tax on salt and fifteen hundred rebelled, attacked the city, and captured it after a sharp fight. It was reported that they immediately beheaded the mandarin's wives and children, and boiled him alive in oil.

A Quiet Curve of the Mekong River

Although the magistrate offered to assist us in every way we could obtain no information concerning either hunting grounds or routes of travel. The flying squirrels which we had hoped to find near the city were reported to come from a mountain range beyond the Mekong in Burma, and Wei-hsi was merely a center of distribution for the skins. Moreover, the natives said it would be impossible to obtain squirrels at that time of the year, for the mountain passes were so heavily covered with snow that neither men nor caravans could cross them.

It was desirable, however, to descend to the Mekong River in order to determine whether there would be a change in fauna, and on Major Davies' map a small road was marked down the valley. A stiff climb of a day and a half over a thickly forested mountain ridge, frozen and snow-covered, brought us in sight of the green waters of the Mekong which has carved a gorge for itself in an almost straight line from the bleak Tibetan plateaus through Yün-nan and Indo-China to the sea.

Our second camp was on the river at the mouth of a deep valley, near a small village. Wu said that the natives were Lutzus and I was inclined to believe he was right, although Major Davies indicates this region to be inhabited by Lisos. At any rate these people both in physical appearance and dress were quite distinct from the Lisos whom we met later.

They were exceedingly pleasant and friendly and the chief, accompanied by four venerable men, brought a present of rice. I gave him two tins of cigarettes and the natives returned to the village wreathed in smiles.

The garments of the Lutzus were characteristic and quite unlike those of the Mosos, Lisos or Tibetans. The

women wore a long coat or jacket of blue cloth, trousers, and a very full pleated skirt. The men were dressed in plum colored coats and trousers.

The natives said that monkeys (probably *Pygathrix*) were often seen when the corn was ripe and that even yet they might be found in the forest across the river. Heller spent a day hunting them, but found none and we obtained only one new mammal in our traps. It was a tiny mouse (*Micromys*) but the remainder of the fauna was essentially the same as that of the Yangtze valley and the intervening country.

For three days we traveled down the Mekong River. Although the natives said that the trail was good, we discovered when it was too late that it was too narrow and difficult to make it practicable for a caravan such as ours. It was necessary to continually remove the loads in order to lift them around sharp corners or over rocks, and the *mafus* sometimes had to cut away great sections of the bank. Usually only six or seven miles could be traversed after eight or nine hours of exhausting work, and we were glad when we could leave the river.

The Mekong, on an average, is not more than a hundred yards wide in this region and, like the Yangtze, the water is very green from the Tibetan snows. The prevailing rock is red slate or sandstone instead of limestone, as in the country to the eastward, and the sides of the valley are so precipitous that it seems impossible for a human being to walk over them, and yet they are patched with brown corn fields from the summit to the water. Considering the small area available for cultivation there are a considerable number of inhabitants, who have gathered into villages and seldom live in isolated houses as in the Yangtze valley. Wherever a stream comes

down from the mountain-side or can be diverted by irrigating ditches, the ground is beautifully terraced for rice paddys, but in other places, corn and peas appear to be the principal crops. Very few vegetables, such as turnips, squash, carrots or potatoes are raised, which is rather remarkable, as they are so abundant in all the country between the Mekong and the Yangtze rivers. In several places the water was spanned by rope bridges. The cables are made of twisted bamboo, and as one end must necessarily be higher than the other, there are always two ropes, one to cross each way. The traveler is tied by leather thongs in a sitting position to a wooden "runner" which slides along the bamboo cable and shoots across the river at tremendous speed.

The valley is hopeless from a zoölogical standpoint. It is too dry for small mammals and the mountain slopes are so precipitous, thinly forested, and generally undesirable, that, except for gorals, no other large game would live there. The bird life is decidedly uninteresting. There are no cranes or sheldrakes and, except for a few flocks of mallards which feed in the rice fields, we saw no other ducks or geese.

On December 20, we turned away from the Mekong valley and began to march southeast by east across an unmapped region toward Ta-li Fu. We camped at night on a pretty ridge thickly covered with spruce trees just above a deep moist ravine. In the morning our traps contained several rare shrews, five silver moles, a number of interesting mice, and a beautiful rufous spiny rat. It was too good a place to leave and I sent Hotenfa to inquire from a family of natives if there was big game of any sort in the vicinity. He reported that there were goral not far away, and at half past eight

we rode down the trail for three miles when I left my horse at a peasant's house. They told us that the goral were on a rocky, thinly forested mountain which rose two thousand feet above the valley, and for an hour and a half we climbed steadily upward.

We were resting near the summit on the rim of a deep cañon when Hotenfa excitedly whispered, *"gnai-yang"* and held up three fingers. He tried to show the animals to me and at last I caught sight of what I thought was a goral standing on a narrow ledge. I fired and a bit of rock flew into the air while the three gorals disappeared among the trees two hundred feet above the spot where I had supposed them to be.

I was utterly disgusted at my mistake but we started on a run for the other side of the gorge. When we arrived, Hotenfa motioned me to swing about to the right while he climbed along the face of the rock wall. No sooner had he reached the edge of the precipice than I saw him lean far out, fire with my three-barrel gun, and frantically wave for me to come. I ran to him and, throwing my arms about a projecting shrub, looked down. There directly under us stood a huge goral, but just as I was about to shoot, the earth gave way beneath my feet and I would have fallen squarely on the animal had Hotenfa not seized me by the collar and drawn me back to safety.

The goral had not discovered where the shower of dirt and stones came from before I fired hurriedly, breaking his fore leg at the knee. Without the slightest sign of injury the ram disappeared behind a corner of the rock. I dashed to the top of the ridge in time to see him running at full speed across a narrow open ledge toward a thick mass of cover on the opposite side of the cañon. I

fired just as the animal gained the trees and, at the crash of my rifle, the goral plunged headlong down the mountain, stone dead.

It fell on a narrow slide of loose rock which led nearly to the bottom of the valley and, slipping and rolling in a cloud of red dust, dropped over a precipice. The ram brought up against an unstable boulder five hundred feet below us, and it required half an hour's hard work to reach the spot.

When I finally lifted its head one of the horns which had been broken in the fall slipped through my fingers, and away went the goral on another rough and tumble descent, finally stopping on a rock ledge nearly eleven hundred feet from the place where it had been shot. We returned to camp at noon bringing joy with us, for, as my wife had remarked the day before, "We will soon have to eat chickens or cans."

Heller hunted the gorals unsuccessfully the following day and we left on December 23, camping at night on a flat terrace beside a stream at the end of a moist ravine. We intended to spend Christmas here for it was a beautiful spot, surrounded by virgin forest, but our celebration was to be on Christmas Eve. The following day dawned bright and clear. There had not been a drop of rain for nearly a month and the weather was just warm enough for comfort in the sun with one's coat off, but at night the temperature dropped to about 15°+ or 20°+ Fahr. The camp proved to be a good one, giving us two new mammals and, just after tiffin, Hotenfa came running in to report that he had discovered seven gray monkeys (probably *Pygathrix*) in a cornfield a mile away.

The monkeys had disappeared ere we arrived, but while we were gone Yvette had been busy and, just be-

fore dinner, she ushered us into our tent with great ceremony. It had been most wonderfully transformed. At the far end stood a Christmas tree, blazing with tiny candles and surrounded by masses of white cotton, through which shone red holly berries. Holly branches from the forest and spruce boughs lined the tent and hung in green waves from the ridge pole. At the base of the tree gifts which she had purchased in Hongkong in the preceding August were laid out.

Heller mixed a fearful and wonderful cocktail from the Chinese wine and orange juice, and we drank to each other and to those at home while sitting on the ground and opening our packages. We had purchased two Tibetan rugs in Li-chiang and Wei-hsi, as Christmas presents for Yvette. These rugs usually are blue or red, with intricate designs in the center, and are well woven and attractive.

To the servants and *mafus* we gave money and cigarettes. When the muleteers were brought to the tent to receive their gifts they evidently thought our blazing tree represented an altar, for they kneeled down and began to make the "chin, chin joss" which is always done before their heathen gods.

Our Christmas dinner was a masterpiece. Four days previously I had shot a pair of mallard ducks and they formed the *pièce de résistance*. The dinner consisted of soup, ducks stuffed with chestnuts, currant jelly, baked squash, creamed carrots, chocolate cake, cheese and crackers, coffee and cigarettes.

Christmas day we traveled, and in the late afternoon passed through a very dirty Chinese town in a deep valley near some extensive salt wells. Red clay dust lay thick over everything and the filth of the streets and

houses was indescribable. We camped in a cornfield a mile beyond the village, but were greatly annoyed by the Chinese who insisted on swarming into camp. Finally, unable longer to endure their insolent stares, I drove them with stones to the top of the hill, where they sat in row upon row exactly as in the "bleachers" at an American baseball game.

When we left the following day we passed dozens of caravans and groups of men and women carrying great disks of salt. Each piece was stamped in red with the official mark for salt is a government monopoly and only licensed merchants are allowed to deal in it; moreover, the importation of salt from foreign countries is forbidden. For the purposes of administration, China is divided into seven or eight main circuits, each of which has its own sources of production and the salt obtained in one district may not be sold in another.

In Yün-nan the salt of the province is supplied from three regions. The water from the wells is boiled in great caldrons for several days, and the resulting deposit is earth impregnated with salt. This is crushed, mixed with water, and boiled again until only pure salt remains. After passing a village of considerable size called Pei-ping, we began the ascent of an exceedingly steep mountain range twelve thousand feet high. All the afternoon we toiled upward in the rain and camped late in the evening at a pine grove on a little plateau two-thirds of the way to the summit. During the night it snowed heavily and we awoke to find ourselves in a transformed world.

Every tree and bush was dressed in garments of purest white and between the branches we could look westward across the valley toward the Mekong and the purple mountain wall of the Burma border. There were

still one thousand feet of climbing between us and the summit of the pass. The trail was almost blocked, but by slow work we forced our way through the drifts. Some of the mules were already weak from exposure and underfeeding, and two of them had to be relieved of their loads; they died the next day. Our *mafus* did not appear to suffer greatly although their legs were bare from the knees down and their feet had no covering except straw sandals. Indeed when we discovered, on the summit of the pass, a tiny hut in which a fire was burning, they waited only a few moments to warm themselves.

We met two other caravans fighting their way up the mountain from the other side, and by following the trail which they had broken through the drifts we made fairly good time on the descent. There had been no snow on the broad, flat plain which we reached in the late afternoon and we found that its ponds and fields were alive with ducks, geese, and cranes. The birds were wild but we had good shooting when we broke camp in the morning and killed enough to last us several days.

On December 31, our weary days of crossing range after range of tremendous mountains were ended, and we stood on the last pass looking down upon the great Chien-chuan plain. Outside the grim walls of the old city, which lies on the main A-tun-tzu-Ta-li Fu road, are two large marshy ponds and, away to the south, is an extensive lake. We camped just without the courtyard of a fine temple, and at four o'clock Yvette and I went over to the water which was swarming with ducks and geese.

Neither of us will ever forget that shoot in the glorious afternoon sunlight. Cloud after cloud of ducks rose as we neared the pond and circled high above our heads, but

now and then a straggling mallard or "pin tail" would swing across the sky within range; as my gun roared out the birds would whirl to the ground like feathered bombs or climb higher with frightened quacks if the shot went wild. An hour before dark the brahminy ducks began to come in. We could hear their melodious plaintive calls long before we could see the birds, and we flattened ourselves out in the grass and mud. Soon a thin, black line would streak the sky, and as they drew nearer, Yvette would draw such seductive notes from a tiny horn of wood and bone that the flock would swing and dive toward us in a rush of flashing wings. When we could see the brown bodies right above our heads I would sit up and bang away.

Now and then a big white goose would drop into the pond or an ibis flap lazily overhead, seeming to realize that it had nothing to fear from the prostrate bodies which spat fire at other birds. The stillness of the marsh was absolute save for the voices of the water fowl mingled in the wild, sweet clamor so dear to the heart of every sportsman. As the day began to die, hung about with ducks and geese, we walked slowly back across the rice fields, to the yellow fires before our tents. It was our last camp for the year and, as if to bid us farewell as we journeyed toward the tropics, the peaks of the great Snow Mountain far to the north, had draped themselves in a gorgeous silver mantle and glistened against a sky of lavender and gold like white cathedral spires.

On January 3, we camped early in the afternoon on a beautiful little plain beside a spring overhung with giant trees at the head of Erh Hai, or Ta-li Fu Lake, which is thirty miles long. The fields and marshes were alive with ducks, geese, cranes, and lapwings, and we had a

glorious day of sport over decoys and on the water before we went on to Ta-li Fu.

Mr. Evans was about to leave for a long business trip to the south of the province and we took possession of a pretty temple just within the north gate of the city. Here we read a great accumulation of mail and learned that a thousand pounds of supplies which we had ordered from Hongkong had just arrived.

Through the good offices of Mr. Howard Page, manager of the Standard Oil Company of Yün-nan Fu, their passage through Tonking had been facilitated, and he had dispatched the boxes by caravan to Ta-li Fu. Mr. Page rendered great assistance to the Expedition in numberless ways, and to him we owe our personal thanks as well as those of the American Museum of Natural History.

All the servants except our faithful Wu left at Ta-li Fu but, with the aid of Mr. Hanna, we obtained a much better personnel for the trip to the Burma frontier. The cook, who was one of Mr. Hanna's converts, was an especially fine fellow and proved to be as energetic and competent as the other had been lazy and helpless.

Our work in the north had brought us a collection of thirteen hundred mammals, as well as several hundred birds, much material for habitat groups, and a splendid series of photographic records in Paget color plates, black and white negatives, and motion picture film. But what was of first importance, we had covered an enormous extent of diverse country and learned much about the distribution of the fauna of northern Yün-nan. The thirteen hundred mammals of our collection were taken in a more or less continuous line across six tremendous mountain ranges, and furnish an illuminating cross sec-

The Temple in which We Camped at Ta-li Fu

A Crested Muntjac

tion of the entire region from Ta-li-Fu, north to Chung-tien, and west to the Mekong River.

It is apparent that in this part of the province, which is all within one "life zone," even the smallest mammals are widely spread and that the principal factor in determining distribution is the flora. Neither the highest mountain ridges nor such deep swift rivers as the Yangtze and the Mekong appear to act as effective barriers to migration, and as long as the vegetation remains constant, the fauna changes but little.

CHAPTER XXV

MISSIONARIES WE HAVE KNOWN

During our work in Fukien Province and in various parts of Yün-nan we came into intimate personal contact with a great many missionaries; indeed every traveler in the interior of China will meet them unless he purposely avoids doing so. But the average tourist seldom sees the missionary in his native habitat because, for the most part, he lives and works where the tourist does not go.

Nevertheless, that does not prevent the coastwise traveler from carrying back with him from the East a very definite impression of the missionary, which he has gained on board ships or in Oriental clubs where he hears him "damned with faint praise." Almost unconsciously he adopts the popular attitude just as he enlarges his vocabulary to include "pidgin English" and such unfamiliar phrases as "tiffin," "bund" and "cumshaw."

This chapter is not a brief for the missionary, but simply a matter of fair play. We feel that in justice we ought to present our observations upon this subject, which is one of very general interest, as impartially as upon any phase of our scientific work. But it should be distinctly understood that we are writing *only* of those persons whom we met and lived with, and whose work we had an opportunity to know and to see; *we are not attempting generalizations on the accomplishments of missionaries in any other part of China.*

There are three charges which we have heard most

frequently brought against the missionary: that he comes to the East because he can live better and more luxuriously than he can at home; that he often engages in lucrative trade with the natives; and that he accomplishes little good, either religious or otherwise. It is said that his converts are only "rice Christians," and treaty-port foreigners have often warned us in this manner, "Don't take Christian servants; they are more dishonest and unreliable than any others."

It is often true that the finest house in a Chinese town will be that of the resident missionary. In Yen-ping the mission buildings are imposing structures, and are placed upon a hill above and away from the rest of the city. Any white person who has traveled in the interior of China will remember the airless, lightless, native houses, opening, as they all do, on filthy streets and reeking sewers and he will understand that in order to exist at all a foreigner must be somewhat isolated and live in a clean, well-ventilated house.

Every missionary in China employs servants—many more servants than he could afford at home. So does every other foreigner, whatever his vocation. There is no such thing in China as the democracy of the West, and the missionary's status in the community demands that certain work in his house be done by servants; otherwise he and his family would be placed on a level with the coolie class and the value of his words and deeds be discounted. But the chief reason is that the missionary's wife almost always has definite duties to which she could not attend if she were not relieved from some of the household cares. She leads in work among the women of the community by organizing clubs and "Mutual Improvement Societies" and in teaching in the

schools or hospitals where young men and women are learning English as an asset to medical work among their own people. Servants are unbelievably cheap. While we were in Foochow a cook received $3.50 (gold) per month, a laundryman $1.75 (gold) per month, and other wages were in proportion.

In Fukien Province the missionaries receive two months' vacation. Anyone who has lived through a Fukien summer in the interior of the province will know why the missionaries are given this vacation. If they were not able to leave the deadly heat and filth and disease of the native cities for a few weeks every year, there would be no missionaries to carry on the work. The business man can surround himself with innumerable comforts both in his home and in his office which the missionary cannot afford and, during the summer, life is not only made possible thereby but even pleasant.

Yen-ping is eight days' travel from Foochow up the Min River and it is by no means the most remote station in the province. Very few travelers reach these places during the year and the white inhabitants are almost isolated. Miss Mabel Hartford lives alone at Yuchi and at one time she saw only one foreigner in eight months. Miss Cordelia Morgan is the sole foreign resident of Chu-hsuing Fu, a large Chinese city six days from Yün-nan Fu. In Ta-li Fu, Reverend William J. Hanna, his wife and two other women, are fourteen days' ride from the nearest foreign settlement. In Li-chiang, Reverend and Mrs. A. Kok and their three small children live with two women missionaries. They are twenty-one days' travel from a doctor, and for four years previous to our visit they had not seen a white woman.

These are some instances of missionaries whom we met

in China who have voluntarily exiled themselves to remote places where they expect to spend their entire lives surrounded by an indifferent if not hostile population. Can anyone possibly believe that they have chosen this life because it is easier or more luxurious than that at home?

Some of the men whom we met had left lucrative business positions to take up medical or evangelistic work in China where their compensation is pitifully small—not one-third of the salary they were commanding at home.

We did not meet any missionaries who were engaging in trade with the natives even though in some places there were excellent business opportunities.

Consider the doctors as examples of the civilizing influences which missionaries bring with them. We saw them in various parts of China doing a magnificent work. Dr. Bradley has established a great leper hospital at Paik-hoi where these human outcasts are receiving the latest and most scientific treatment and beginning to look at life with a new hope. In Yen-ping, at the time of the rebellion, we saw Dr. Trimble working hour after hour over wounded and broken men without a thought of rest. In Yün-nan Fu, Dr. Thompson's hospital was filled with patients suffering from almost every known disease. In Ta-li Fu we saw Mr. Hanna and his wife dispensing medicines and treating the minor ills of patients waiting by the dozen, the fees received being not enough to pay for the cost of the medicines. Why is it that every traveling foreigner in the interior of China is supposed to be able to cure diseases? Certainly an important reason is because of the work done by the medical missionaries who have penetrated to the farthest corners of the most remote provinces.

Aside from their medical work, missionaries are in many instances the real pioneers of western civilization. They bring to the people new standards of living, both morally and physically. They open schools and emancipate the Chinese children in mind and body. They fight the barbarous customs of foot binding and the killing and selling of girl babies. Until recent years it was not unusual to meet the village "baby peddler" with from two to six tiny infants peddling his "goods" from village to village. Not many years ago such a man appeared before the mission compound at Ngu-cheng (Fukien) with four babies in his basket. Three of these had expired from exposure and the kerosene oil which had been poured down their throats to stupefy them and drown their cries. The fourth was purchased by the wife of the native preacher for ten cents in order to save its life. This child was reared and has since graduated from the mission schools with credit. In Foochow a stone tablet bearing the following inscription stands beside a stagnant pool: "Hereafter the throwing of babies into this pool will be punished by law." This was a result of the work of the missionaries.

Their task is by no means easy and, as Mr. Hanna once remarked, "Yün-nan Province has broken the heart of more than one missionary." The Chinese do not understand their point of view, and it is difficult to make them see it. A Chinaman is a rank materialist and pure altruism does not enter into his scheme of life. As a rule he has but two thoughts, his stomach and his cash bag. It is well-nigh impossible to make him realize that the missionary has not come with an ulterior motive—if not to engage in trade, perhaps as a spy for his government. Others believe that it is because China is so vastly su-

perior to the rest of the world that the missionaries wish to live there. Eventually the suspicions of the natives become quieted and they accept the missionary at some part of his true worth.

At the time of the rebellion in Yen-ping we saw Harry Caldwell, Mr. Bankhart and Dr. Trimble save the lives of hundreds of people and the city from partial destruction because the Chinese officers of the opposing forces would trust the missionaries when they would not trust each other.

An excellent piece of practical missionary work was done in Fukien Province, not long after our visit there. As we have related in Chapter III, several large bands of brigands were established in the hills about Yuchi. Brigandage began there in the following way. During a famine when the people were on the verge of starvation, a wealthy farmer, Su Ek by name, decided to do his share in relieving conditions by offering for sale a quantity of rice which he had accumulated. He approached another man of similar wealth who agreed with him to sell his grain at a reasonable price. Su Ek accordingly disposed of his rice to the suffering people and, when he had remaining only enough to sustain his own family until the following harvest, he sent the peasants to the second man who had also agreed to dispose of his grain.

This farmer refused to sell at the stipulated price, and the people, angered at his treachery, looted his sheds. He immediately went to Foochow and reported to the governor that there was a band of brigands abroad in Yuchi County under the leadership of Su Ek, and that they had robbed and plundered his property.

Without warning a company of soldiers swooped

down upon the community and arrested a number of men whose names the informer had given. Su Ek made his escape to the hills but he was pursued as a brigand chief, and was later joined by other farmers who had been similarly persecuted. Unable to return to their homes on pain of death they were forced to rob in order to live.

Su Ek and others were finally decoyed to Foochow upon the promise that their lives would be spared if they would induce their band to surrender. They met the conditions but the government officials broke faith and the men were executed. Similar attempts were made to enter into negotiations with the brigands and in 1915 two hundred were trapped and beheaded after pardons had been promised them. Naturally the robbers refused to trust the government officials again.

The months which elapsed between this act of treachery and the spring of 1916, were filled with innumerable outrages. Many townships were completely devastated, either by the bandits or the Chinese soldiers. Little will ever be known of what actually took place under the guise of settling brigandage, behind the mountains which separate Yuchi from the outer world. It is well that it should not be known.

During the spring of 1916 a missionary visited Yuchi. Business called him outside the city wall and just beyond the west gate he saw the bodies of ten persons who had that day been executed. Among these were two children, brothers, the sons of a man who was reported to have "sold rice to the brigands." The smaller child had wept and pleaded to be permitted to kneel beside his older brother further up in the row. He was too

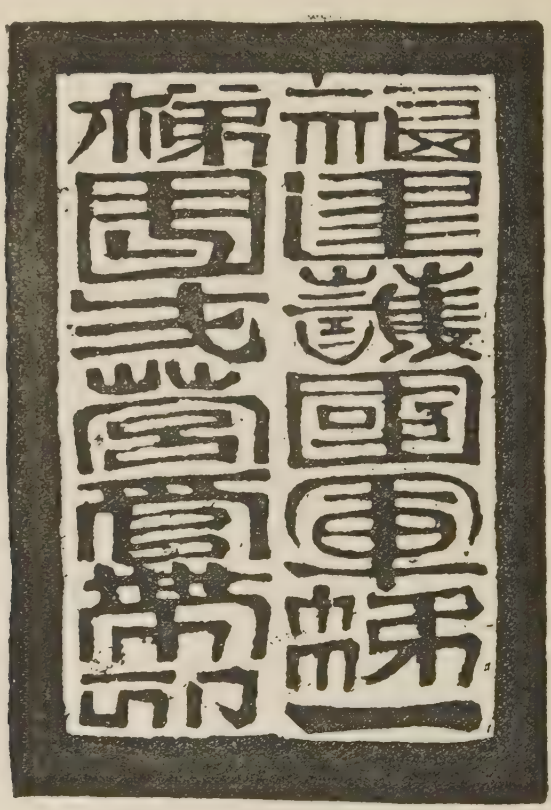
small to realize what it all meant but he wanted to die beside his brother.

In the middle of the field lay a man whose head was partly severed from his body and who had been shot through and through by the soldiers. He was lying upon his back in the broiling sun pleading for a cup of tea or for someone to put him out of his misery. The missionary learned the man's story. It appeared that years ago a law suit in which his father had been concerned had been decided in his favor. In order to square the score between the clans, the son of the man who had lost the suit had reported that he had seen this man carrying rice to the brigands. He had been arrested by the soldiers, partially killed, and left to lie in the glaring sun from nine o'clock in the morning until dark suffering the agonies of crucifixion. Not one of those who heard his moans dared to moisten the parched lips with tea lest he too be executed for having administered to a brigand.

The missionary returned to the city that night vowing that he would make a recurrence of such a thing impossible or he would leave China. He took up the matter with the authorities in Peking in a quiet way and later with the military governor in Foochow. He was well known to the brigands by reputation and visited several of the chiefs in their strongholds. They declared that they had confidence in him but none in the government or its representatives. It was only after assuming full responsibility for any treachery that the brigands agreed to discuss terms.

Upon invitation to accompany him to the 24th Township, the missionary was escorted out to civilization by twenty-five picked men to whom the chief had entrusted

an important charge. As the group neared the township the missionary sent word ahead to the commander of the northern soldiers to prepare to receive the brigands.



Seal of a Pardoned Brigand.

As the twenty-five bandits appeared upon the summit of a hill overlooking the city, soldiers could be seen forming into squads outside the barracks. Instantly the brigands halted, snapped back the bolts of their rifles, and threw in shells. The missionary realized that they suspected treachery and turning about he said, "I

The South Gate at Yung-chang

A Chinese Bride Returning to Her Mother's Home at New Year's

am the guarantee for your lives. If a short is fired kill me first."

With two loaded guns at his back and accompanied by the brigands he marched into the city, where they were received by the officials with all the punctilious ceremony so dear to the heart of the Chinese. It had been a dangerous half hour for the missionary. If a rifle had been fired by mistake, and Chinese are always shooting when they themselves least expect to, he would have been instantly killed.

This conference, and others which followed, resulted in several hundred pardons being distributed to the brigands by the missionary himself. The men then returned to their abandoned homes and again took up their lives as respectable farmers. Thus the reign of terror in this portion of the province was ended through the efforts of one courageous man. It is such applied Christianity that has made us respect the missionary and admire his work.

CHAPTER XXVI

CHINESE NEW YEAR AT YUNG-CHANG

Y. B. A.

The last half of the expedition began January 13 when we left Ta-li Fu with a caravan of thirty miles for Yung-chang, eight days' travel to the south. The *mafus* although they had promised faithfully to come "at daylight" did not arrive until nearly noon and in consequence it was necessary to camp at Hsia-kuan at the foot of the lake.

We improved our time there in hunting about for skins and finally purchased two fine leopards and a tiger. The latter had been brought from the Tonking frontier. There were a number of Tibetans wandering about the market place and in the morning a caravan of at least two hundred horses followed by twenty or thirty Tibetans, passed into the city while it was yet gray dawn. They were bringing tea from P'u-erh and S'su-mao in the south of the province and although they had already been nearly a month upon their journey there was still many long weeks of travel before them ere they reached the wind-blown steppes of their native land.

The trip to Yung-chang proved uninteresting and uneventful. We crossed a succession of dry, thinly forested mountains from 7,000 to 8,000 feet high which near their summits were often clothed with a thick growth of rhododendron trees. The beautiful red flowers flashed like

fire balls among the green leaves, peach trees were in full blossom and in some spots the dry hills seemed about to break forth in the full glory of their spring verdure. We crossed the Mekong near a village called Shia-chai on a picturesque chain suspension bridge of a type which is not unusual in the southern and western part of the province. Several heavy iron chains are firmly fastened to huge rock piers on opposite sides of the river and the roadway formed by planks laid upon them. Although the bridge shakes and swings in a rather alarming manner when a caravan is crossing, it is perfectly safe if not too heavily loaded.

In the afternoon of January 21, we rode down the mountain to the great Yung-chang plain, and for two hours trotted over a hard dirt road. The plain is eighteen miles long by six miles wide and except for its scattered villages, is almost entirely devoted to paddy fields. The city itself includes about five thousand houses. It is exceedingly picturesque and is remarkable for its long, straight, and fairly clean streets which contrast strongly with those of the usual Chinese town. At the west, but still within the city walls, is a picturesque wooded hill occupied almost exclusively by temples.

We ourselves camped between two ponds in the courtyard of a large and exceptionally clean temple just outside the south gate of the city. It was the Chinese New Year and Wu told us that for several days at least it would be impossible to obtain another caravan or expect the natives to do any work whatever. It was a very pleasant place in which to stay although we chafed at the enforced delay, but we made good use of our time in photographing and developing motion picture film, collecting birds and making various excursions.

Chinese New Year is always interesting to a foreigner and at Yung-chang we saw many of the customs attending its celebration. It is a time of feasting and merry making and no native, if he can possibly avoid it, will work on that day. Chinese families almost always live under one roof but should any male member be absent at this season the circumstances must be exceptional to prevent him from returning to his home.

It is customary, too, for brides to revisit their mother's house at New Year's. On our way to Yung-chang and for several days after leaving the city, we were continually passing young women mounted on mules or horses and accompanied by servants returning to their homes. New clothes are a leading feature of this season and the dresses of the brides and young matrons were usually of the most unexpected hues for, according to our conception of color, the Chinese can scarcely be counted conspicuous for their good taste. Purple and blue, orange and red, pink and lavender clash distressingly, but are worn with inordinate pride.

These visits are not an unalloyed pleasure to the bride's family. Dr. Smith says in "Chinese Characteristics":

> When she goes to her mother's home, she goes on a strictly business basis. She takes with her it may be a quantity of sewing for her husband's family, which the wife's family must help her get through with. She is accompanied on each of these visits by as many of her children as possible, both to have her take care of them and to have them out of the way when she is not at hand to look after them, and most especially to have them fed at the expense of the family of the maternal grandmother for as long a time as possible. In regions where visits of this sort are frequent, and where there

are many daughters in a family, their constant raids on the old home are a source of perpetual terror to the whole family, and a serious tax on the common resources.[1]

Religious rites and ceremonies form a conspicuous part in the New Year's celebration. At this time the "Kitchen God," according to current superstition, returns to heaven to render an account of the household's behavior. The wily Chinese, however, first rubs the lips of the departing deity with candy in order to "sweeten" his report of any evil which he may have witnessed during the year.

Usually all the members of the family gather before the ancestral tablets, or should these be lacking as among many of the laboring classes, a scroll with a part of the genealogy is displayed and the spirits of the departed are appeased and honored by the burning of incense and the mumbling of incantations. While strict attention is paid to the religious observance to the dead, at New Year's the most punctilious ceremony is rendered to the living.

After the family have paid their respects to one another the younger male members go from house to house "kowtowing" to the elders who are there to receive them. The following days are devoted to visits to relatives living in the neighboring towns and villages, and this continues, an endless routine, until fourteen days later the Feast of the Lanterns puts an end to the "epoch of national leisure."

The Chinese are inveterate gamblers and at New Year's they turn feverishly to this form of amusement which is almost their only one. But they also have to

[1] "Chinese Characteristics," by Arthur H. Smith, p. 200.

think seriously about paying their debts for it is absolutely necessary for all classes and conditions of men to meet their obligations at the end of the year.

Almost everyone owes money in China. According to the clan system an individual having surplus cash is obliged to lend it (though at a high rate of interest) to any members of his family in need of help. However, a Chinaman never pays cash unless absolutely obliged to and almost never settles a debt until he has been dunned repeatedly.

The activity displayed at New Year's is ludicrous.

Each separate individual [says Dr. Smith] is engaged in the task of trying to chase down the men who owe money to him, and compel them to pay up, and at the same time in trying to avoid the persons who are struggling to track *him* down and corkscrew from him the amount of his indebtedness to them! The dodges and subterfuges to which each is obliged to resort, increase in complexity and number with the advance of the season, until at the close of the month, the national activity is at fever heat. For if a debt is not secured then, it will go over till a new year, and no one knows what will be the status of a claim which has actually contrived to cheat the annual Day of Judgment. In spite of the excellent Chinese habit of making the close of a year a grand clearing-house for all debts, Chinese human nature is too much for Chinese custom, and there are many of these postponed debts which are a grief of mind to many a Chinese creditor.

The Chinese are at once the most practical and the most sentimental of the human race. New Year *must not* be violated by duns for debts, and the debts *must* be collected New Year though it be. For this reason one sometimes sees an urgent creditor going about early on the first day of the year carrying a lantern looking for his creditor [= debtor]. His artificial light shows that by a social fiction the sun has not yet

risen, it is still yesterday and the debt can still be claimed. . . .

We have but to imagine the application of the principles which we have named, to the whole Chinese Empire, and we get new light upon the nature of the Chinese New Year festivities. They are a time of rejoicing, but there is no rejoicing so keen as that of a ruined debtor, who has succeeded by shrewd devices in avoiding the most relentless of his creditors and has thus postponed his ruin for at least another twelve months.

For, once past the narrow strait at the end of the year, the debtor finds himself again in the broad and peaceful waters, where he cannot be molested. Even should his creditors meet him on New Year's day, there could be no possibility of mentioning the fact of the previous day's disgraceful flight and concealment, or indeed of alluding to business at all, for this would not be "good form" and to the Chinese "Good Form" (otherwise known as custom), is the chief national divinity.[1]

Yung-chang appears to be almost entirely inhabited by Chinese and in no part of the province did we see foot-binding more in evidence. Practically every woman and girl, young or old, regardless of her station in life was crippled in this brutal way. The women wear long full coats with flaring skirts which hang straight from their shoulders to their knees. When the trousers are tightly wrapped about their shrunken ankles, they look in a side view exactly like huge umbrellas.

One day we visited a cave thirty *li* north of the city where we hoped to find new bats. A beautiful little temple has been built over the entrance to the cavern which does not extend more than forty or fifty feet into the rock. But twenty *li* south of Yung-chang, just beyond the village of A-shih-wo, there is an enormous cave

[2] "Village Life in China," by Arthur H. Smith, 1907, pp. 208-209.

which is reported to extend entirely through the hill. Whether or not this is true we can not say for although we explored it in part we did not reach the end. The central corridor is about thirty feet wide and at least sixty or seventy high. We followed the main gallery for a long distance, and turned back at a branch which led off at a sharp angle. We were not equipped with sufficient candles to pursue the exploration more extensively and did not have time to visit it again. The cave contained some beautiful stalactites of considerable size, but the limestone was a dull lead color. We found only one bat and these animals appear not to have used it extensively since there was little sign upon the floor.

At Yuang-chang we saw water buffaloes for the first time in Yün-nan but found them to be in universal use farther to the south and west. The huge brutes are as docile as a kitten in the hands of the smallest native child but they do not like foreigners and discretion is the better part of valor where they are concerned.

Water buffaloes are only employed for work in the rice fields but Chinese cows are used as burden bearers in this part of the province. Such caravans travel much more slowly than do mule trains although the animals are not loaded as heavily. Two or three of the leading cows usually carry upon their backs large bells hung in wooden frameworks and the music is by no means unmelodious when heard at a distance. Marco Polo, the great Venetian traveler, refers to Yung-chang as "Vochang." His account of a battle which was fought in its vinicity in the year 1272 between the King of Burma and Bengal and one of Kublai Khan's generals is so interesting that I am quoting it below:

When the king of Mien [Burma] and Bangala [Bengal], in India, who was powerful in the number of his subjects, in extent of territory, and in wealth, heard that an army of Tartars had arrived at Vochang [Yung-chang] he took the resolution of advancing immediately to attack it, in order that by its destruction the grand khan should be deterred from again attempting to station a force upon the borders of his dominions. For this purpose he assembled a very large army, including a multitude of elephants (an animal with which his country abounds), upon whose backs were placed battlements or castles, of wood, capable of containing to the number of twelve or sixteen in each. With these, and a numerous army of horse and foot, he took the road to Vochang, where the grand khan's army lay, and encamping at no great distance from it, intended to give his troops a few days of rest.

As soon as the approach of the king of Mien, with so great a force, was known to Nestardín, who commanded the troops of the grand khan, although a brave and able officer, he felt much alarmed, not having under his orders more than twelve thousand men (veterans, indeed, and valiant soldiers); whereas the enemy had sixty thousand, besides the elephants armed as has been described. He did not, however, betray any sign of apprehension, but descending into the plain of Vochang, took a position in which his flank was covered by a thick wood of large trees, whither, in case of a furious charge by the elephants, which his troops might not be able to sustain, they could retire, and from thence, in security, annoy them with their arrows. . . .

Upon the king of Mien's learning that the Tartars had descended into the plain, he immediately put his army in motion, took up his ground at the distance of about a mile from the enemy, and made a disposition of his force, placing the elephants in the front, and the cavalry and infantry, in two extended wings, in their rear, but leaving between them a considerable interval. Here he took his own station, and pro-

ceeded to animate his men and encourage them to fight valiantly, assuring them of victory, as well from the superiority of their numbers, being four to one, as from their formidable body of armed elephants, whose shock the enemy, who had never before been engaged with such combatants, could by no means resist. Then giving orders for sounding a prodigious number of warlike instruments, he advanced boldly with his whole army towards that of the Tartars, which remained firm, making no movement, but suffering them to approach their entrenchments.

They then rushed out with great spirit and the utmost eagerness to engage; but it was soon found that the Tartar horses, unused to the sight of such huge animals, with their castles, were terrified, and by wheeling about endeavored to fly; nor could their riders by any exertions restrain them, whilst the king, with the whole of his forces, was every moment gaining ground. As soon as the prudent commander perceived this unexpected disorder, without losing his presence of mind, he instantly adopted the measure of ordering his men to dismount and their horses to be taken into the wood, where they were fastened to the trees.

When dismounted, the men without loss of time, advanced on foot towards the line of elephants, and commenced a brisk discharge of arrows; whilst, on the other side, those who were stationed in the castles, and the rest of the king's army, shot volleys in return with great activity; but their arrows did not make the same impression as those of the Tartars, whose bows were drawn with a stronger arm. So incessant were the discharges of the latter, and all their weapons (according to the instructions of their commander) being directed against the elephants, these were soon covered with arrows, and, suddenly giving way, fell back upon their own people in the rear, who were thereby thrown into confusion. It soon became impossible for their drivers to manage them, either by force or address. Smarting under the pain of their wounds, and terrified

by the shouting of the assailants, they were no longer governable, but without guidance or control ran about in all directions, until at length, impelled by rage and fear, they rushed into a part of the wood not occupied by the Tartars. The consequence of this was, that from the closeness of the branches of large trees, they broke, with loud crashes, the battlements or castles that were upon their backs, and involved in the destruction those who sat upon them.

Upon seeing the rout of the elephants the Tartars acquired fresh courage, and filing off by detachments, with perfect order and regularity, they remounted their horses, and joined their several divisions, when a sanguinary and dreadful combat was renewed. On the part of the king's troops there was no want of valor, and he himself went amongst the ranks entreating them to stand firm, and not to be alarmed by the accident that had befallen the elephants. But the Tartars by their consummate skill in archery, were too powerful for them, and galled them the more exceedingly, from their not being provided with such armor as was worn by the former.

The arrows having been expended on both sides, the men grasped their swords and iron maces, and violently encountered each other. Then in an instant were to be seen many horrible wounds, limbs dismembered, and multitudes falling to the ground, maimed and dying; with such effusion of blood as was dreadful to behold. So great also was the clangor of arms, and such the shoutings and the shrieks, that the noise seemed to ascend to the skies. The king of Mien, acting as became a valiant chief, was present wherever the greatest danger appeared, animating his soldiers, and beseeching them to maintain their ground with resolution. He ordered fresh squadrons from the reserve to advance to the support of those that were exhausted; but perceiving at length that it was impossible any longer to sustain the conflict or to withstand the impetuosity of the Tartars, the greater part of his troops being either killed or wounded, and all the field covered with

the carcasses of men and horses, whilst those who survived were beginning to give way, he also found himself compelled to take to flight with the wreck of his army, numbers of whom were afterwards slain in the pursuit. . . .

The Tartars having collected their force after the slaughter of the enemy, returned towards the wood into which the elephants had fled for shelter, in order to take possession of them, where they found that the men who had escaped from the overthrow were employed in cutting down trees and barricading the passages, with the intent of defending themselves. But their ramparts were soon demolished by the Tartars, who slew many of them, and with the assistance of the persons accustomed to the management of the elephants, they possessed themselves of these to the number of two hundred or more. From the period of this battle the grand khan has always chosen to employ elephants in his armies, which before that time he had not done. The consequences of the victory were, that he acquired possession of the whole of the territories of the king of Bangala and Mien, and annexed them to his dominions.[1]

[1] "The Travels of Marco Polo the Venetian." Everyman's Library. J. M. Dent & Sons, Ltd., London; pp. 253-256.

CHAPTER XXVII

TRAVELING TOWARD THE TROPICS

We left Yung-chang with no regret on Monday, January 28. Our stay there would have been exceedingly pleasant under ordinary conditions but it was impossible not to chafe at the delay occasioned by the caravan. Traveling southward for two days over bare brown mountain-sides, their monotony unrelieved except by groves of planted pine and fir trees, we descended abruptly into the great subtropical valley at Shih-tien.

Mile after mile this fertile plain stretches away in a succession of rice paddys and fields of sugar cane interspersed with patches of graceful bamboo, their summits drooping like enormous clusters of ostrich plumes; the air is warm and fragrant and the change from the surrounding hills is delightful. However, we were disappointed in the shooting for, although it appeared to be an ideal place for ducks and other water birds, we killed only five teal, and the great ponds were almost devoid of bird life. Even herons, so abundant in the north, were conspicuous by their absence and we saw no sheldrakes, geese, or mallards.

At Shih-tien we camped in a beautiful temple yard on the outskirts of the town, and with Wu I returned to the village to inquire about shooting places. We seated ourselves in the first open tea house and within ten minutes more than a hundred natives had filled the

room, overflowed through the door and windows, and formed a mass of pushing, crowding bodies which completely blocked the street outside. It was a simple way of getting all the village together and Wu questioned everyone who looked intelligent.

We learned that shooting was to be found near Genkang, five days' travel south, and we returned to the temple just in time to receive a visit from the resident mandarin. He was a good-looking, intellectual man, with charming manners and one of the most delightful gentlemen whom we met in China.

During his visit, and until dinner was over and we had retired to our tents, hundreds of men, women and children crowded into the temple yard to gaze curiously at us. After the gates had been closed they climbed the walls and sat upon the tiles like a flock of crows. Their curiosity was insatiable but not unfriendly and nowhere throughout our expedition did we find such extraordinary interest in our affairs as was manifested by the people in this immediate region. They were largely Chinese and most of them must have met foreigners before, yet their curiosity was much greater than that of any natives whom we knew were seeing white persons for the first time.

Just before camping the next day we passed through a large village where we were given a most flattering reception. We had stopped to do some shooting and were a considerable distance behind the caravan. The *mafus* must have announced our coming, for the populace was out *en masse* to greet us and lined the streets three deep. It was a veritable triumphal entry and crowds of men and children followed us for half a

A Chinese Patriarch

Young China

mile outside the town, running beside our horses and staring with saucer-like eyes.

On the second day from Shih-tien we climbed a high mountain and wound down a sharp descent for about 4,000 feet into a valley only 2,300 feet above sea level. We had been cold all day on the ridges exposed to a biting wind and had bundled ourselves into sweaters and coats over flannel shirts. After going down about 1,000 feet we tied our coats to the saddle pockets, on the second thousand stripped off the sweaters, and for the remainder of the descent rode with sleeves rolled up and shirts open at the throat. We had come from mid-winter into summer in two hours and the change was most startling. It was as though we had suddenly ridden into an artificially heated building like the rooms for tropical plants at botanical gardens.

Our camp was on a flat plain just above the river where we had a splendid view of the wide valley which was like the bottom of a well with high mountains rising abruptly on all sides. It was a place of strange contrasts. The bushes and trees were in full green foliage but the grass and paddy fields were dry and brown as in mid-winter. The thick trees at the base of the hills were literally alive with doves but there were few mammal runways and our traps yielded no results. That night a muntjac, the first we had heard, barked hoarsely behind the tents.

The *yamen* "soldier" who accompanied us from Shih-tien delivered his official dispatch at the village (Ma-po-lo) which lies farther down the valley. The magistrate, who proved to be a Shan native, arrived soon after with ten or twelve men and we discovered that there was but one man in the village who spoke Chinese.

The magistrate at Ma-po-lo by no means wished to have the responsibility of our safety thrust upon him and consequently assured us that there were neither game nor hunters in this village. Although his anxiety to be rid of us was apparent, he was probably telling the truth, for the valley is so highly cultivated (rice), and the cover on the mountain-sides so limited, that it is doubtful if much game remains.

In the morning the entire valley was filled with a dense white fog but we climbed out of it almost immediately, and by noon were back again in winter on the summits of the ridges. The country through which we passed *en route* to Gen-kang was similar to that which had oppressed us during the preceding week—cultivated valleys between high barren mountains relieved here and there by scattered groves of planted fir trees. It was a region utterly hopeless from a naturalist's standpoint and when we arrived at a large town near Gen-kang we were well-nigh discouraged.

During almost a month of travel we had been guided by native information which without exception had proved worthless. It seemed useless to rely upon it further, and yet there was no other alternative, for none of the foreigners whom we had met in Yün-nan knew anything about this part of the province. We were certain to reach a tropical region farther south and the fact that there were a few sambur skins for sale in the market offered slight encouragement. These were said to come from a village called Meng-ting, "a little more far," to the tune of four or five days' travel, over on the Burma frontier.

With gloom in our hearts, which matched that of the weather, we left in a pouring rain on February 5,

to slip and splash southward through veritable rivers of mud for two long marches. In the afternoon of the second day the country suddenly changed. The trail led through a wide grassy valley, bordered by heavily forested hills, into a deep ravine. Along the banks of a clear stream the earth was soft and damp and the moss-covered logs and dense vegetation made ideal conditions for small mammalian life.

We rode happily up the ravine and stood in a rocky gateway. At the right a green-clothed mountain rose out of a tangle of luxuriant vegetation; to the left wave after wave of magnificent forested ridges lost themselves in the low hung clouds; at our feet lay a beautiful valley filled with stately trees which spread into a thick green canopy overhead.

We camped in a clearing just at the edge of the forest. While the tents were being pitched, I set a line of traps along the base of the opposite mountain and found a "runway" under almost every log. About eight o'clock I ran my traps and, with the aid of a lantern, stumbled about in the bushes and high grass, over logs and into holes. When I emptied my pockets there were fifteen mice, rats, shrews, and voles, representing seven species *and all new to our collection.* Heller brought in eight specimens and added two new species. We forthwith decided to stay right where we were until this "gold mine" had been exhausted.

In the morning our traps were full of mammals and sixty-two were laid out on the table ready for skinning. The length, tail, hind foot, and ear of each specimen was first carefully measured in millimeters and recorded in the field catalogue and upon a printed label bearing our serial number; then an incision was made in the belly,

the skin stripped off, poisoned with arsenic, stuffed with cotton, and sewed up. The animal was then pinned in position by the feet, nose, and tail in a shallow wooden tray which fitted in the collecting trunk.

The specimens were put in the sun on every bright day until they were thoroughly dry and could be wrapped in cotton and packed in water-tight trunks or boxes. We have found that the regulation U. S. Army officer's fiber trunk makes an ideal collecting case. It measures thirty inches long by thirteen deep and sixteen inches wide and will remain quite dry in an ordinary rain but, of course, must not be allowed to stand in water. The skulls of all specimens, and the skeletons of some, are numbered like the skin, strung upon a wire, and dried in the sun. Also individuals of every species are injected and preserved in formalin for future anatomical study.

Larger specimens are always salted and dried. As soon as the skin has been removed and cleaned of flesh and fat, salt is rubbed into every part of it and the hide rolled up. In the morning it is unwrapped, the water which has been extracted by the salt poured off, and the skin hung over a rope or a tree branch to dry. If it is not too hot and the air is dry, the skin may be kept in the shade to good advantage, but under ordinary field conditions it should be placed in the sun. Before it becomes too hard, the hide is rolled or folded into a convenient package hair side in, tied into shape and allowed to become "bone dry." In this condition it will keep indefinitely but requires constant watching, for the salt absorbs moisture from the air and alternate wetting and drying is fatal.

We soon trained two of our Chinese boys to skin

both large and small animals and they became quite expert. They required constant watching, however, and after each hide had been salted either Mr. Heller or I examined it to make sure that it was properly treated.

On our first day in camp we sent for natives to the village of Mu-cheng ten *li* distant. The men assured us that there were sambur, serow, and muntjac in the neighborhood, and they agreed to hunt. They had no dogs and were armed with crossbows, antiquated guns, and bows and arrows, but they showed us the skins of two sambur in proof of their ability to secure game.

Like most of the other natives, with the exception of the Mosos on the Snow Mountain, these men had no definite plan in hunting. The first day I went out with them they indicated that we were to drive a hill not far from camp. Without giving me an opportunity to reach a position in front of them, they began to work up the hill, and I had a fleeting glimpse of a sambur silhouetted against the sky as it dashed over the summit.

Two days later while I was out with ten other men who had a fairly good pack of dogs, the first party succeeded in killing a female sambur. The animal weighed at least five hundred pounds but they brought it to our camp and we purchased the skin for ten *rupees*. South of Gen-kang the money of the region, like all of Yünnan for some distance from the Burma frontier, is the Indian *rupee* which equals thirty-three cents American gold; in that part of the province adjoining Tonking, French Indo-China money is current.

My Journal of February 8 tells of our life at this camp, which we called "Good Hope."

The weather is delightful for the sun is just warm enough for comfort and the nights are clear and cold. How we do sleep! It seems hardly an hour from the time we go to bed until we hear Wu rousing the servants, and the crackle of the camp-fire outside the tent. We half dress in our sleeping bags and with chattering teeth dash for the fire to lace our high boots in its comfortable warmth.

After breakfast when it is full daylight, my wife and I inspect the traps. The ground is white with frost and the trees and bushes are dressed in silver. Every trap holds an individual interest and we follow the line through the forest, resetting some, and finding new mammals in others. Yvette has conquered her feminine repugnance far enough to remove shrews or mice from the traps by releasing the spring and dropping them on to a broad green leaf, but she never touches them.

We go back to meet the hunters and while I am away with the men, the lady of the camp works at her photography. I return in the late afternoon and after tea we wander through the woods together. It is the most delightful part of the day when the sun goes down and the shadows lengthen. We sit on a log in a small clearing where we can watch the upper branches of a splendid tree. It is the home of a great colony of red-bellied squirrels (*Callosciurus erythræus* subsp.) and after a few moments of silence we see a flash of brown along a branch, my gun roars out, and there is a thud upon the ground.

Yvette runs to find the animal and ere the echoes have died away in the forest the gun bangs again. We have already shot a dozen squirrels from this tree and yet more are there. Sometimes a tiny, striped chipmunk (*Tamiops macclellandi* subsp.) will appear on the lower branches, searching the bark for grubs, and after he falls we have a long hunt to find him in the brown leaves. When it is too dark to see the squirrels, we wander slowly back to camp and eat a dinner of delicious

broiled deer steak in front of the fire; over the coffee we smoke and talk of the day's hunting until it is time to "run the traps."

Of all the work we enjoy this most. With lanterns and a gun we pick our way among the trees until we strike the trail along which the traps are set. On the soft ground our feet are noiseless and, extinguishing the lanterns, we sit on a log to listen to the night sounds. The woods are full of life. Almost beside us there is a patter of tiny feet and a scurry among the dry leaves; a muntjac barks hoarsely on the opposite hillside, and a fox yelps behind us in the forest. Suddenly there is a sharp snap, a muffled squeal, and a trap a few yards away has done its work. Even in the tree tops the night life is active. Dead twigs drop to the ground with an unnatural noise, and soft-winged owls show black against the sky as they flit across an opening in the branches.

We light the lanterns again and pass down the trail into a cuplike hollow. Here there are a dozen traps and already half of them are full. In one is a tiny brown shrew caught by the tail as he ran across the trap; another holds a veritable treasure, and at my exclamation of delight Yvette runs up excitedly. It is a rare Insectivore of the genus *Hylomys* and possibly a species new to science. We examine it beside the lantern, wrap it carefully in paper, and drop it into a pocket by itself.

The next bit of cotton clings to a bush above a mossy log. The trap is gone and for ten minutes we hunt carefully over every inch of ground. Finally my wife discovers it fifteen feet away and stifles a scream for in it, caught by the neck and still alive, is a huge rat nearly two feet long; it too is a species which may prove new.

When the last trap has been examined, we follow the trail to the edge of the forest and into the clearing where the tents glow in the darkness like great yellow pumpkins. Ours is delightfully warmed by the charcoal brazier and, stretched comfortably on the beds, we write our daily records or read Dickens

for half an hour. It is with a feeling of great contentment that we slip down into the sleeping bags and blow out the candles leaving the tent filled with the soft glow of the moonlight.

CHAPTER XXVIII

MENG-TING: A VILLAGE OF MANY TONGUES

During the eight days in which we remained at the "Good Hope" camp, two hundred specimens comprising twenty-one species were added to our collection. Although the altitude was still 5,000 feet, the flora was quite unlike that of any region in which we had previously collected, and that undoubtedly was responsible for the complete change of fauna. We were on the very edge of the tropical belt which stretches along the Tonking and Burma frontiers in the extreme south and west of the province.

It was already mid-February and if we were to work in the fever-stricken valleys below 2,000 feet, it was high time we were on the way southward. The information which we had obtained near Gen-kang had been supplemented by the natives of Mu-cheng, and we decided to go to Meng-ting as soon as possible.

The first march was long and uneventful but at its end, from the summit of a high ridge, we could see a wide valley which we reached in the early morning of the second day. The narrow mountain trail abruptly left us on a jutting promontory and wandered uncertainly down a steep ravine to lose itself in a veritable forest of tree ferns and sword grass. The slanting rays of the sun drew long golden paths into the mysterious depths of the mist-filled valley. To the right a giant sentinel peak of granite rose gaunt and naked from out

the enveloping sea of green which swelled away to the left in huge ascending billows.

We rested in our saddles until the faint tinkle of the bell on the leading mule announced the approach of the caravan and then we picked our way slowly down the steep trail between walls of tangled vegetation. In an hour we were breathing the moist warm air of the tropics and riding across a wide valley as level as a floor. The long stretches of rank grass, far higher than our heads, were broken by groves of feathery bamboos, banana palms, and splendid trees interlaced with tangled vines.

Near the base of the mountains a Shan village nestled into the grass. The bamboo houses, sheltered by trees and bushes, were roofed in the shape of an overturned boat with thatch and the single street was wide and clean. Could this really be China? Verily, it was a different China from that we had seen before! It might be Burma, India, Java, but never China!

Before the door of a tiny house sat a woman spinning. A real Priscilla, somewhat strange in dress to be sure and with a mouth streaked with betel nut, but Priscilla just the same. And in his proper place beside her stood John Alden. A pair of loose, baggy trousers, hitched far up over one leg to show the intricate tattoo designs beneath, a short coat, and a white turban completed John's attire, but he grasped a gun almost as ancient in design as that of his Pilgrim fathers. Priscilla kept her eyes upon the spinning wheel, but John's gaze could by no stretch of imagination be called ardent even before we appeared around a corner of the house and the pretty picture resolved into its rightful components—a surprised, but not unlovely Shan girl and

A Shan Village

A Shan Woman Spinning

a well-built, yellow-skinned native who stared with wide brown eyes and open mouth at what must have seemed to him the fancy of a disordered brain.

For into his village, filled with immemorial peace and quiet, where every day was exactly like the day before, had suddenly ridden two big men with white skins and blue eyes, and a little one with lots of hair beneath a broad sun helmet. And almost immediately the little one had jumped from the horse and pointed a black box with a shiny front at him and his Priscilla. At once, but without loss of dignity, Priscilla vanished into the house, but John Alden stood his ground, for a beautiful new tin can had been thrust into his hand and before he had really discovered what it was the little person had smiled at him and turned her attention to the charming street of his village. There the great water buffalos lazily chewed their cuds standing guard over the tiny brown-skinned natives who played trustingly with the calves almost beneath their feet.

Such was our invasion of the first Shan village we had ever seen, and regretfully we rode away across the plain between the walls of waving grass toward the Nam-ting River. Two canoes, each dug out of a single log, and tightly bound together, formed the ferry, but the packs were soon across the muddy stream and the mules were made to swim to the other bank. Shortly after leaving the ferry we emerged from the vast stretches of rank grass on to the open rice paddys which stretched away in a gently undulating plain from the river to the mountains. Strangely enough we saw no ducks or geese, but three great flocks of cranes (probably *Grus communis*) rose from the fields and wheeled in ever-widening spirals

above our heads until they were lost in the blue depths of the sky.

Away in the distance we saw a wooded knoll with a few wisps of smoke curling above its summit, but not until we were well-nigh there did we realize that its beautiful trees sheltered the thatched roofs of Meng-ting. But this was only the "residential section" of the village and below the knoll on the opposite side of a shallow stream lay the shops and markets.

We camped on a dry rice dyke where a fringe of jungle separated us from the nearest house. As soon as the tents were up I announced our coming to the mandarin and requested an interview at five o'clock. Wu and I found the *yamen* to be a large well-built house, delightfully cool and exhibiting several foreign articles which evinced its proximity to Burma.

We were received by a suave Chinese "secretary" who shortly introduced the mandarin—a young Shan not more than twenty years old who only recently had succeeded his late father as chief of the village. The boy was dressed in an exceedingly long frock coat, rather green and frayed about the elbows, which in combination with his otherwise typical native dress gave him a most extraordinary appearance.

We soon discovered that the Chinese secretary who did all the talking was the "power behind the throne." He accepted my gift of a package of tea with great pleasure, but the information about hunting localities for which we asked was not forthcoming. He first said that he knew of a place where there were tiger and leopard, but that he did not dare to reveal it to us for we might be killed by the wild animals and he would be responsible for our deaths; bringing to his attention the

fact that tigers had never been recorded from the Meng-ting region did not impress him in the slightest.

It did tend to send him off on another track, however, and he next remarked that if he sent us to a place where the hunting was disappointing we probably would report him to the district mandarin. Assurances to the contrary had no effect. It was perfectly evident that he wished only to get us out of his district and thus relieve himself of the responsibility of our safety. During the conversation, which lasted more than an hour, the young Shan was not consulted and did not speak a word; he sat stolidly in his chair, hardly winking, and except for the constant supply of cigarettes which passed between his fingers there was no evidence that he even breathed.

The interview closed with assurances from the Chinaman that he would make inquiries concerning hunting grounds and communicate with us in the morning. We returned to camp and half an hour later a party of natives arrived from the *yamen* bearing about one hundred pounds of rice, a sack of potatoes, two dozen eggs, three chickens, and a great bundle of fire wood. These were deposited in front of our tent as gifts from the mandarin.

We were at a loss to account for such generosity until Wu explained that whenever a high official visited a village it was customary for the mandarin to supply his entire party with food during their stay. It would be quite polite to send back all except a few articles, however, for the supplies were levied from the inhabitants of the town. We kept the eggs and chickens, giving the *yamen* "runners" considerably more than their value in money, and they gratefully returned with the rice and potatoes.

On the hill high above our camp was a large Shan

Buddhist monastery, bamboo walled and thatched with straw, and at sunset and daybreak a musical chant of childish voices floated down to us in the mist-filled valley. All day long tiny yellow-robed figures squatted on the mud walls about the temple like a flock of birds peering at us with bright round eyes. They were wild as hawks, these little priests and, although they sometimes left the shelter of their temple walls, they never ventured below the bushy hedge about our rice field.

In the village we saw them often, wandering about the streets or sitting in yellow groups beneath the giant trees which threw a welcome shade over almost every house. They were not all children, and finely built youths or men so old that they seemed like wrinkled bits of lemon peel, passed to and fro to the temple on the hill.

There is no dearth of priests, for every family in the village with male children is required to send at least one boy to live a part of his life under the tutelage of the Church. He must remain three years, and longer, if he wishes. The priests are fed by the monastery, and their clothing is not an important item of expenditure as it consists merely of a straw hat and a yellow robe. They lead a lazy, worthless life, and from their sojourn in religious circles they learn only indolence and idleness.

The day following our arrival in Meng-ting the weekly market was held, and when Wu and I crossed the little stream to the business part of the village, we found ourselves in the midst of the most picturesque crowd of natives it has ever been my fortune to see. It was a group flashing with color, and every individual a study for an artist. There were blue-clad Chinese, Shans with tattooed legs, turbans of pink or white, and

Burmans dressed in brilliant purple or green, Las, yellow-skinned Lisos, flat-faced Palaungs, Was, and Kachins in black and red strung about with beads or shells. Long swords hung from the shoulders of those who did not carry a spear or gun, and the hilts of wicked looking daggers peeped from beneath their sashes. Every man carried a weapon ready for instant use.

Nine tribes were present in the market that day and almost as many languages were being spoken. It was a veritable Babel and half the trading was done by signs. The narrow street was choked with goods of every kind spread out upon the ground: fruit, rice, cloth, nails, knives, swords, hats, sandals, skins, horns, baskets, mats, crossbows, arrows, pottery, tea, opium, and scores of other articles for food or household use.

Dozens of natives were arriving and departing, bringing new goods or packing up their purchases; under open, thatched pavilions were silent groups of men gambling with cash or silver, and in the "tea houses" white-faced natives lay stretched upon the couches rolling "pills" of opium and oblivious to the constant stream of passers-by.

It was a picturesque, ever changing group, a kaleidoscopic mass of life and color, where Chinese from civilized Canton drank, and gambled, and smoked with wild natives from the hills or from the depths of fever-stricken jungles.

After one glimpse of the picture in the market I dashed back to camp to bring the "Lady of the Camera." On the way I met her, hot and breathless, half coaxing, half driving three bewildered young priests resplendent in yellow robes. All the morning she had been trying vainly to photograph a priest and had discovered these

splendid fellows when all her color plates had been exposed. She might have succeeded in bringing them to camp had I not arrived, but they suddenly lost courage and rushed away with averted faces.

When the plate holders were all reloaded we hurried back to the market followed by two coolies with the cameras. Leaving Yvette to do her work alone I set up the cinematograph. Wu was with me and in less than a minute the narrow space in front of us was packed with a seething mass of natives. It was impossible to take a "street scene" for the "street" had suddenly disappeared. Making a virtue of necessity I focused the camera on the irregular line of heads and swung it back and forth registering a variety of facial expressions which it would be hard to duplicate. For some time it was impossible to bribe the natives to stand even for a moment, but after one or two had conquered their fear and been liberally rewarded, there was a rush for places. Wu asked several of the natives who could speak Chinese if they knew what we were doing but they all shook their heads. None of them had ever seen a camera or a photograph.

The Kachin women were the most picturesque of all the tribes as well as the most difficult to photograph. Yvette was not able to get them at all, and I could do so only by strategy. When Wu discovered two or three squatting near their baskets on the ground I moved slowly up behind them keeping in the center of the crowd. After the "movie camera" was in position Wu suddenly "shooed" back the spectators and before the women realized what was happening they were registered on twenty-five or thirty feet of film.

One of the Kachin men, who had drunk too much,

A Kachin Woman in the Market at Meng-ting

One of Our Shan Hunters with Two Yellow Gibbons

suddenly became belligerent when I pointed the camera in his direction, and rushed at me with a drawn knife. I swung for his jaw with my right fist and he went down in a heap. He was more surprised than hurt, I imagine, but it took all of the fight out of him for he received no sympathy from the spectators.

Poor Yvette had a difficult time with her camera operations and a less determined person would have given up in despair. The natives were so shy and suspicious that it was well-nigh impossible to bribe them to stand for a second and it was only after three hours of aggravating work in the stifling heat and dust that she at last succeeded in exposing all her plates. Her patience and determination were really wonderful and I am quite sure that I should not have obtained half her results.

The Kachin women were extraordinary looking individuals. They were short, and strongly built, with a mop of coarse hair cut straight all around, and thick lips stained with betel nut. Their dress consisted of a short black jacket and skirt reaching to the knees, and ornamented with strings of beads and pieces of brass or silver. This tribe forms the largest part of the population in northern Burma and also extends into Assam. Yün-nan is fortunate in having comparatively few of them along its western frontier for they are an uncivilized and quarrelsome race and frequently give the British government considerable trouble.

There were only a few Burmans in the market although the border is hardly a dozen miles to the west, but the girls were especially attractive. Their bright pretty faces seemed always ready to break into a smile and their graceful figures draped in brilliant *sarongs*

were in delightful contrast to the other, not over-clean, natives.

The Burma girls were not chewing betel nut, which added to their distinction. The lips of virtually every other woman and man were stained from the red juice, which is in universal use throughout India, the Malay Peninsula, and the Netherlands Indies. In Yün-nan we first noted it at the "Good Hope" camp, and the Shans are generally addicted to the practice.

The permanent population of Meng-ting is entirely Shan, but during the winter a good many Cantonese Chinamen come to gamble and buy opium. The drug is smuggled across the border very easily and a lucrative trade is carried on. It can be purchased for seventy-five cents (Mexican) an ounce in Burma and sold for two dollars (Mexican) an ounce in Yün-nan Fu and for ten dollars in Shanghai.

Opium is smoked publicly in all the tea houses. The drug is cooked over an alcohol lamp and when the "pill" is properly prepared it is placed in the tiny bowl of the pipe, held against the flame and the smoke inhaled. The process is a rather complicated one and during it the natives always recline. No visible effect is produced even after smoking several pipefuls, but the deathly paleness and expressionless eye marks the inveterate opium user.

There can be no doubt that the Chinese government has been, and is, genuinely anxious to suppress the use of opium and it has succeeded to a remarkable degree. We heard of only one instance of poppy growing in Yün-nan and often met officials, accompanied by a guard of soldiers, on inspection trips. Indeed, while we were in Meng-ting the district mandarin arrived. We

were sitting in our tents when the melodious notes of deep-toned gongs floated in through the mist. They were like the chimes of far away cathedral bells sounding nearer and louder, but losing none of the sweetness. Soon a long line of soldiers appeared and passed the camp bearing in their midst a covered chair. The mandarin established himself in a spacious temple on the opposite side of the village, where I visited him the following day and explained the difficulty we had had at the Meng-ting *yamen*. He aided us so effectually that all opposition to our plans ended and we obtained a guide to take us to a hunting place on the Nam-ting River, three miles from the Burma border.

CHAPTER XXIX

CAMPING ON THE NAM-TING RIVER

Every morning the valley at Meng-ting was filled with a thick white mist and when we broke camp at daylight each mule was swallowed up in the fog as soon as it left the rice field. We followed the sound of the leader's bell, but not until ten o'clock was the entire caravan visible. For thirty *li* the valley is broad and flat as at Meng-ting and filled with a luxuriant growth of rank grass, but it narrows suddenly where the river has carved its way through a range of hills.

The trail led uncertainly along a steep bank through a dense, tropical jungle. Palms and huge ferns, broad-leaved bananas, and giant trees laced and interlaced with thorny vines and hanging creepers formed a living wall of green as impenetrable as though it were a net of steel. We followed the trail all day, sometimes picking our way among the rocks high above the river or padding along in the soft earth almost at the water's edge. At night we camped in a little clearing where some adventurous native had fought the jungle and been defeated; his bamboo hut was in ruins and the fields were overgrown with a tangle of throttling vegetation.

We had seen no mammals, but the birds along the road were fascinating. Brilliant green parrots screamed in the tree tops and tiny sun-birds dressed in garments of red and gold and purple, flashed across the trail like living jewels. Once we heard a strange whirr and saw a

huge hornbill flapping heavily over the river, every beat of his stiff wing feathers sounding like the motor of an aëroplane. Bamboo partridges called from the bushes and dozens of unfamiliar bird notes filled the air.

At eleven o'clock on the following morning we passed two thatched huts in a little clearing beside the trail and the guide remarked that our camping place was not far away. We reached it shortly and were delighted. Two enormous trees, like great umbrellas, spread a cool, dark shade above a sparkling stream on the edge of an abandoned rice field. From a patch of ground as level as a floor, where our tents were pitched, we could look across the brown rice dykes to the enclosing walls of jungle and up to the green mountain beyond. A half mile farther down the trail, but hidden away in the jungle, lay a picturesque Shan village of a dozen huts, where the guide said we should be able to find hunters.

As soon as tiffin was over we went up the creek with a bag of steel traps to set them on the tiny trails which wound through the jungle in every direction. Selecting a well-beaten patch we buried the trap in the center, covered it carefully with leaves, and suspended the body of a bird or a chunk of meat by a wire over the pan about three feet from the ground. A light branch was fastened to the chain as a "drag." When the trap is pulled this invariably catches in the grass or vines and, while holding the animal firmly, still gives enough "spring" to prevent its freeing itself.

Trapping is exceedingly interesting for it is a contest of wits between the trapper and the animal with the odds by no means in favor of the former. The trap may not be covered in a natural way; the surroundings may be unduly disturbed; a scent of human hands

may linger about the bait, or there may be numberless other possibilities to frighten the suspicious animal.

In the evening our guide brought a strange individual whom he introduced as the best hunter in the village. He was a tall Mohammedan Chinese who dressed like a Shan and was married to a Shan woman. He seemed to be afflicted with mental and physical inertia, for when he spoke it was in slow drawl hardly louder than a whisper, and every movement of his body was correspondingly deliberate. We immediately named him the "Dying Rabbit" but discovered very shortly that he really had boundless energy and was an excellent hunter.

The next morning he collected a dozen Shans for beaters and we drove a patch of jungle above camp but without success. There were many sambur tracks in the clearings, but we realized at once that it was going to be difficult to get deer because of the dense cover; the open places were so few and small that a sambur had every chance to break through without giving a shot.

Nearly all the beaters carried guns. The "Dying Rabbit" was armed with a .45-caliber bolt action rifle into which he had managed to fit a .303 shell and several of the men had Winchester carbines, model 1875. The guns had all been brought from Burma and most were without ammunition, but each man had an assortment of different cartridges and used whichever he could force into his rifle.

The men worked splendidly under the direction of the "Dying Rabbit." On the second day they put up a sambur which ran within a hundred feet of us but was absolutely invisible in the high grass. When we returned to camp we found that a civet (*Viverra*) had

Our Camp on the Nam-ting River

The Shan Village at Nam-ka

walked past our tent and begun to eat the scraps about the cook box, regardless of the shouts of the *mafus* and servants who were imploring Heller to bring his gun. After considerable difficulty they persuaded him that there really was some cause for their excitement and he shot the animal. It was probably ill, for its flesh was dry and yellow, but the skin was in excellent condition.

Civets belong to the family *Viverridæ* and are found only in Asia and Africa. Although they resemble cats superficially they are not directly related to them and their claws are only partly retractile. They are very beautiful animals with a grayish body spotted with black, a ringed tail, and a black and white striped pointed head. A scent gland near the base of the tail secretes a strong musk-like odor which, although penetrating, is not particularly disagreeable. The animals move about chiefly in the early morning and evening and at night and prey upon birds, eggs, small mammals, fish, and frogs. One which we caught and photographed had a curious habit of raising the hair on the middle of its back from the neck to the tail whenever it was angry or frightened.

Although there were no houses within half a mile of camp we were surprised on our first night to hear cocks crowing in the jungle. The note was like that of the ordinary barnyard bird, except that it ended somewhat more abruptly. The next morning we discovered Chanticleer and all his harem in a deserted rice field, and he flew toward the jungle in a flash of red and gold.

I dropped him and one of his hens with a right and left of "sixes" and found that they were jungle fowl (*Gallus gallus*) in full plumage. The cock was a splendid bird. The long neck feathers (hackles) spread over his back

and wings like a shimmering golden mantle, but it was hardly more beautiful than the black of his underparts and green-glossed tail. Picture to yourself a "black-breasted red" gamecock and you have him in all his glory except that his tail is drooping and he is more pheasant-like in his general bearing. The female was a trim little bird with a lilac sheen to her brown feathers and looked much like a well-kept game bantam hen.

The jungle fowl is the direct ancestor of our barnyard hens and roosters which were probably first domesticated in Burma and adjacent countries long before the dawn of authentic history. According to tradition the Chinese received their poultry from the West about 1400 B.C. and they are figured in Babylonian cylinders between the sixth and seventh centuries B.C.; although they were probably introduced in Greece through Persia there is no direct evidence as to when and how they reached Europe.

The black-breasted jungle fowl (*Gallus gallus*) inhabit northern India, Burma, Indo-Chinese countries, the Malay Peninsula, and the Philippine Islands; a related species, *G. lafayetti,* is found in Ceylon; another, *G. sonnerati,* in southern India, and a fourth, *G. varius,* in Java.

We found the jungle fowl wild and hard to kill even where they were seldom hunted. During the heat of the day they remain in thick cover, but in cloudy weather and in the early morning and evening they come out into clearings to feed. At our camp on the Nam-ting River we could usually put up a few birds on the edge of the deserted rice fields which stretched up into the jungle, but they were never far away from the edge of the forest.

We sometimes saw single birds of either sex, but usually a cock had with him six or eight hens. It was interesting to watch such a flock feeding in the open. The male, resplendent in his vivid dress, shone like a piece of gold against the dull brown of the dry grass and industriously ran about among his trim little hens, rounding up the stragglers and directing his harem with a few low-toned "clucks" whenever he found some unusually tempting food.

It was his duty, too, to watch for danger and he usually would send the flock whirring into the jungle while they were well beyond shotgun range. When flushed from the open the birds nearly always would alight in the first large tree and sit for a few moments before flying deeper into the jungle. We caught several hens in our steel traps, and one morning at the edge of a swamp I shot a jungle fowl and a woodcock with a "right and left" as they flushed together.

We were at the Nam-ting camp at the beginning of the mating season for the jungle fowl. It is said that they brood from January to April according to locality, laying from eight to twelve creamy white eggs under a bamboo clump or some dense thicket where a few leaves have been scratched together for a nest. The hen announces the laying of an egg by means of a proud cackle, and the chicks themselves have the characteristic "peep, peep, peep" of the domestic birds. After the breeding season the beautiful red and gold neck hackles of the male sometimes are molted and replaced by short blackish feathers.

There seems to be some uncertainty as to whether the cocks are polygamous, but our observations tend to show that they are. We never saw more than one male in a

flock and in only one or two instances were the birds in pairs. The cocks are inveterate fighters like the domestic birds and their long curved spurs are exceedingly effective weapons.

We set a trap for a leopard on a hill behind the Namting River camp and on the second afternoon it contained a splendid polecat. This animal is a member of the family Mustelidæ which includes mink, otter, weasels, skunks, and ferrets, and with its brown body, deep yellow throat, and long tail is really very handsome. Polecats inhabit the Northern Hemisphere and are closely allied to the ferret which so often is domesticated and used in hunting rats and rabbits. We found them to be abundant in the low valleys along the Burma border and often saw them during the day running across a jungle path or on the lower branches of a tree. The polecat is a blood-thirsty little beast and kills everything that comes in its way for the pure love of killing, even when its appetite has been satisfied.

On the third morning we found two civets in the traps. The cook told me that some animal had stolen a chicken from one of his boxes during the night and we set a trap only a few yards from our tent on a trail leading into the grass. The civet was evidently the thief for the cook boxes were not bothered again.

Inspecting the traps every morning and evening was a delightful part of our camp life. It was like opening a Christmas package as we walked up the trails, for each one held interesting possibilities and the mammals of the region were so varied that surprises were always in store for us. Besides civets and polecats, we caught mongooses, palm civets, and other carnivores. The

small traps yielded a new *Hylomys,* several new rats, and an interesting shrew.

We saw a few huge squirrels (*Ratufa gigantea*) and shot one. It was thirty-six inches long, coal black above and yellow below. The animals were very shy and as they climbed about in the highest trees they were by no means easy to see or shoot. They represent an interesting group confined to India, Siam, the Malay Peninsula, the islands of the Dutch East Indies, and Borneo.

CHAPTER XXX

MONKEY HUNTING

Our most exciting sport at the Nam-ting camp was hunting monkeys. Every morning we heard querulous notes which sounded much like the squealing of very young puppies and which were followed by long, siren wails; when the shrill notes had reached their highest pitch they would sink into low mellow tones exceedingly musical.

The calls usually started shortly after daylight and continued until about nine o'clock, or later if the day was dark or rainy. They would be answered from different parts of the jungle and often sounded from half a dozen places simultaneously. The natives assured us that the cries were made by *hod-zu* (monkeys) and several times we started in pursuit, but they always ceased long before we had found a way through the jungle to the spot from which they came. At last we succeeded in locating the animals.

We were inspecting a line of traps placed along a trail which led up a valley to a wide plateau. Suddenly the puppy-like squealing began, followed by a low tremulous wail. It seemed almost over our heads but the trees were empty. We stole silently along the trail for a hundred yards and turned into a dry creek bed which led up the bottom of the forested ravine. With infinite caution, breathing hard from excitement, we slipped along, scanning the top of every tree. A horn-

bill sitting on a dead branch caught sight of us and flapped heavily away emitting horrid squawks. A flock of parrots screamed overhead and a red-bellied squirrel followed persistently scolding at the top of its voice, but the monkeys continued to call.

The querulous squealing abruptly ceased and we stood motionless beside a tree. For an instant the countless jungle sounds were hushed in a breathless stillness; then, low and sweet, sounded a moaning wail which swelled into deep full tones. It vibrated an instant, filling all the forest with its richness, and slowly died away. Again and again it floated over the tree tops and we listened strangely moved, for it was like the music of an exquisite contralto voice. At last it ceased but, ere the echoes had reached the valley, the jungle was ringing with an unlovely siren screech.

The spell was broken and we moved on, alert and tense. The trees stretched upward full one hundred and fifty feet, their tops spread out in a leafy roof. Long ropelike vines festooned the upper branches and a luxuriant growth of parasitic vegetation clothed the giant trunks in a swaying mass of living green. Far above the taller trees a gaunt gray monarch of the forest towered in splendid isolation. In its topmost branches we could just discern a dozen balls of yellow fur from which proceeded discordant squeals.

It was long range for a shotgun but the rifles were all in camp. I fired a charge of B. B.'s at the lowest monkey and as the gun roared out the tree tops suddenly sprang into life. They were filled with running, leaping, hairy forms swinging at incredible speed from branch to branch; not a dozen, but a score of monkeys, yellow, brown, and gray.

The one at which I had shot seemed unaffected and threw itself full twenty feet to a horizontal limb, below and to the right. I fired again and he stopped, ran a few steps forward and swung to the underside of the branch. At the third charge he hung suspended by one arm and dropped heavily to the ground stone dead.

We tossed him into the dry creek bed and dashed up the hill where the branches were still swaying as the monkeys traveled through the tree tops. They had a long start and it was a hopeless chase. At every step our clothes were caught by the clinging thorns, our hands were torn, and our faces scratched and bleeding. In ten minutes they had disappeared and we turned about to find the dead animal. Suddenly Yvette saw a splash of leaves in the top of a tree below us and a big brown monkey swung out on a pendent vine. I fired instantly and the animal hung suspended, whirled slowly around and dropped to the ground. Before I had reloaded my gun it gathered itself together and dashed off through the woods on three legs faster than a man could run. The animal had been hiding on a branch and when we passed had tried to steal away undiscovered.

We found the dead monkey, a young male, in the creek bed and sat down to examine it. It was evidently a gibbon (*Hylobates*), for its long arms, round head, and tailless body were unmistakable, but in every species with which I was familiar the male was black. This one was yellow and we knew it to be a prize. That there were two other species in the herd was certain for we had seen both brown and gray monkeys as they dashed away among the trees, but the gibbons were far more interesting than the others.

The Head of a Gibbon Killed on the Nam-ting River

A Civet

Gibbons are probably the most primitive in skull and teeth of all the anthropoid, or manlike, apes,—the group which also includes the gorilla, chimpanzee, and orang-utan. They are apparently an earlier offshoot of the anthropoid stem, as held by most authorities, and the giant apes and man are probably a later branch. Gibbons are essentially Oriental being found in India, Burma, Siam, Tonking, Borneo, and the Islands of Hainan, Sulu, Sumatra, and Java.

For the remainder of our stay at the Nam-ting River camp we devoted ourselves to hunting monkeys and soon discovered that the three species we had first seen were totally different. One was the yellow gibbon, another a brown baboon (*Macacus*), and the third a huge gray ape with a long tail (*Pygathrix*) known as the "langur." On the first day all three species were together feeding upon some large green beans and this happened once again, but usually they were in separate herds.

The gibbons soon became extremely wild. Although the same troop could usually be found in the valley where we had first discovered them, they chose hillsides where it was almost impossible to stalk them because of the thorny jungle. Usually when they called, it was from the upper branches of a dead tree where they could not only scan every inch of the ground below, but were almost beyond the range of a shotgun. Sometimes we climbed upward almost on our hands and knees, grasping vines and creepers, drawing ourselves up by tree trunks, crawling under thorny shrubs and bushes, slipping, falling, scrambling through the indescribable tangle. We went forward only when the calls were echoing through the jungle, and stood mo-

tionless as the wailing ceased. But in spite of all our care they would see or hear us. Then in sudden silence there would be a tremor of the branches, splash after splash of leaves, and the herd would swing away through the trackless tree tops.

The gibbons are well named *Hylobates* or "tree-walkers" for they are entirely arboreal and, although awkward and almost helpless on the ground, once their long thin hands touch a branch they become transformed as by a miracle.

They launch themselves into space, catch a limb twenty feet away, swing for an instant, and hurl themselves to another. It is possible for them to travel through the trees faster than a man can run even on open ground, and when one examines their limbs the reason is apparent. The fore arms are so exceedingly long that the tips of the fingers can touch the ground when the animal stands erect, and the slender hands are longer than the feet.

The gibbons were exceedingly difficult to kill and would never drop until stone dead. Once I shot an old male with my 6½ mm. Mannlicher rifle at about one hundred yards and, even though the ball had gone clear through his body, he hung for several minutes before he dropped into a tangle of vines.

It was fifteen minutes before we were able to work our way through the jungle to the spot where the animal had fallen, and we had been searching for nearly half an hour when suddenly my wife shouted that a monkey was running along a branch above our heads. I fired with the shotgun at a mass of moving leaves and killed a second gibbon which had been hiding in the thick foliage. Instead of running the animals would

sometimes disappear as completely as though they had vanished in the air. After being fooled several times we learned to conceal ourselves in the bushes where we could watch the trees, and sooner or later the monkeys would try to steal away.

The langurs and baboons were by no means as wild as the gibbons and were found in larger herds. Some of the langurs were carrying babies which clung to their mothers between the fore legs and did not seem to impede them in the slightest on their leaps through the tree tops.

The young of this species are bright orange-red and strangely unlike the gray adults. As they grow older the red hair is gradually replaced by gray, but the tail is the last part of the body to change. Heller captured one of the tiny red monkeys and brought it back to camp in his coat pocket. The little fellow was only a few days old, and of course, absolutely helpless.

When it was wrapped in cotton with only its queer little wizened face and blue eyes visible it had a startling resemblance to a human baby until its long tail would suddenly flop into sight and dispel the illusion. It lived only four days in spite of constant care.

There are fifty-five species of langurs (*Pygathrix*) all of which are confined to the Orient. In some parts of India the animals are sacred and climb about the houses or wander in the streets of villages quite without fear. At times they do so much damage to crops that the natives who do not dare to kill the animals themselves implore foreigners to do so. The langurs are not confined to the tropics, but in the Tibetan mountains range far up into the snow and enjoy the cold weather. In the market at Li-chiang we saw several

skins of these animals which had been brought down by the Tibetans; the hair was long and silky and was used by the Chinese for rugs and coats.

The species which we killed at the Nam-ting River camp, like all others of the genus *Pygathrix,* was interesting because of the long hairs of the head which form a distinct ridge on the occiput. We never heard the animals utter sounds, but it is said that the common Indian langur, *Pygathrix entellus,* gives a loud whoop as it runs through the tree tops. Often when a tiger is prowling about the jungle the Indian langurs will follow the beast, keeping in the branches just above its head and scolding loudly.

The baboon, or macaque, which we killed on the Nam-ting was a close relative of the species (*Macacus rehsus*) which one sees parading solemnly about the streets of Calcutta, Bombay, and other Indian cities. In Agra, the home of the beautiful Taj Mahal, the Monkey Temple is visited by every tourist. A large herd of macaques lives in the grounds and at a few chuckling calls from the native attendants will come trooping over the walls for the food which is kept on sale at the gate. These animals are surprisingly tame and make most amusing pets.

On one of our hunts my wife and I discovered a water hole in the midst of a dense jungle where the mud was trodden hard by sambur, muntjac, wild boar, and other animals. We decided to spend a night watching beside it, but the "Dying Rabbit" who was enthusiastic in the day time lost his courage as the sunlight waned. Very doubtfully he consented to go.

Although the trip netted us no tangible results it was an experience of which we often think. We

started just at dusk and installed ourselves in the bushes a few yards from the water hole. In half an hour the forest was enveloped in the velvety blackness of the tropic night. Not a star nor a gleam of light was visible and I could not see my hand before my face.

We sat absolutely motionless and listened to the breath of the jungle, which although without definite sound, was vibrant with life. Now and then a muntjac barked hoarsely and the roar of a sambur stag thrilled us like an electric shock. Once a wild boar grunted on the opposite bank of the river, the sound coming to us clear and sharp through the stillness although the animal was far away.

Tiny forest creatures rustled all about us in the leaves and a small animal ran across my wife's lap, leaping frantically down the hill as it felt her move. For five hours we sat there absolutely motionless. Although no animals came to the water hole we were silent with a great happiness as we groped our way back to camp, for we had been close to the heart of the jungle and were thrilled with the mystery of the night.

CHAPTER XXXI

THE SHANS OF THE BURMA BORDER

We saw many Shans at the Nam-ting River, for not only was there a village half a mile beyond our camp, but natives were passing continually along the trail on their way to and from the Burma frontier. The village was named Nam-ka. Its chief was absent when we arrived, but the natives were cordial and agreed to hunt with us; when the head man returned, however, he was most unfriendly. He forbade the villagers from coming to our camp and arguments were of no avail. It soon became evident that only force could change his attitude, and one morning, with all our servants and *mafus,* we visited his house. He was informed that unless he ceased his opposition and ordered his men to assist us in hunting we would take him to Meng-ting for trial before the mandarin. He grudgingly complied and we had no further trouble.

We found the Shans at Nam-ka to be simple and honest people but abnormally lazy. During our three weeks' stay not a single trap was stolen, although the natives prized them highly, and often brought to us those in which animals had been caught. Shans were continually about our camp where boxes were left unlocked, but not an article of our equipment was missed.

The Nam-ka Shans elevated their houses on six-foot poles and built an open porch in front of the door, while the dwellings at Meng-ting and farther up the valley

A Shan Girl

A Shan Boy

were all placed upon the ground. The thatched roofs overhung several feet and the sides of the houses were open so that the free passage of air kept them delightfully cool. Moreover, they were surprisingly clean, for the floors were of split bamboo, and the inmates, if they wore sandals, left them at the door. In the center of the single room, on a large flat stone, a small fire always burned, but much of the cooking was done on the porch where a tiny pavilion had been erected over the hearth.

The Shans at Nam-ka had "no visible means of support." The extensive rice paddys indicated that in the past there had been considerable cultivation but the fields were weed-grown and abandoned. The villagers purchased all their vegetables from the Mohammedan hunter and two other Chinese who lived a mile up the trail, or from passing caravans whom they sometimes entertained. In all probability they lived upon the sale of smuggled opium for they were only a few miles from the Burma border.

Virtually every Shan we saw in the south was heavily tattooed. Usually the right leg alone, but sometimes both, were completely covered from the hip to the knee with intricate designs in black or red. The ornamentations often extended entirely around the body over the abdomen and waist, but less frequently on the breast and arms.

All the natives were inordinately proud of these decorations and usually fastened their wide trousers in such a way as to display them to the best advantage. We often could persuade a man to pose before the camera by admiring his tattoo marks and it was most amusing to watch his childlike pleasure.

The Shan tribe is a large one with many subdivisions, and it is probable that at one time it inhabited a large part of China south of the Yangtze River; indeed, there is reason to believe that the Cantonese Chinamen are chiefly of Shan stock, and the facial resemblance between the two races certainly is remarkable.

Although the Shans formerly ruled a vast territory in Yün-nan before its conquest by the Mongol emperors of China in the thirteenth century A. D., and at one time actually subdued Burma and established a dynasty of their own, at present the only independent kingdom of the race is that of Siam. By far the greatest number of Shans live in semi-independent states tributary to Burma, China, and Siam, and in Yün-nan inhabit almost all of the southern valleys below an altitude of 4,000 feet.

The reason that the Chinese allow them to hold such an extent of fertile land is because the low plains are considered unhealthy and the Chinese cannot, or will not, live there. Whether or not the malarial fever of the valleys is so exceedingly deadly remains to be proved, but the Chinese believe it to be so and the result is the same. Where the Shans are numerous enough to have a chief of their own they live in a semi-independent state, for although their head man is subordinate to the district Chinese official, the latter seldom interferes with the internal affairs of the tribe.

The Shans are a short, strongly-built race with a distinct Mongolian type of features and rather fair complexions. Their dress varies decidedly with the region, but the men of the southern part of the province on the Nam-ting River wear a pair of enormous trousers, so baggy that they are almost skirtlike, a white jacket,

and a large white or pink turban surmounted by a huge straw hat. The women dress in a white jacket and skirt of either striped or dark blue cloth; their turbans are of similar material and may be worn in a high cylinder, a low oval, or many other shapes according to the particular part of the province in which they live.

CHAPTER XXXII

PRISONERS OF WAR IN BURMA

Y. B. A.

THE camp at Nam-ka was a supremely happy one and we left it on March 7, with much regret. Its resources seemed to be almost exhausted and the Mohammedan hunter assured us that at a village called Ma-li-ling we would find excellent shooting. We asked him the distance and he replied, "About a long bamboo joint away." It required three days to get there!

Whether the man had ever been to Ma-li-ling we do not know but we eventually found it to be a tiny village built into the side of a hill in an absolutely barren country where there was not a vestige of cover. Our journey there was not uneventful. We left Nam-ka with high hopes which were somewhat dampened after a day's unsuccessful hunting at the spot where our caravan crossed the Nam-ting River.

With a Shan guide we traveled due north along a good trail which led through dense jungle where there was not a clearing or a sign of life. In the afternoon we noted that the trail bore strongly to the west and ascended rapidly. Soon we had left the jungle and emerged into an absolutely treeless valley between high barren hills. We knew that the Burma frontier could not be far away, and in a few moments we passed a

large square "boundary stone"; a hundred yards on the other side the hills were covered with bright green stalks and here and there a field glistened with white poppy blossoms. The guide insisted that we were on the direct road to Ma-li-ling which for the first time he said was in Burma. On our map it was marked well over the border in Chinese territory and we were greatly puzzled.

About six o'clock the brown huts of a village were silhouetted against the sky on a tiny knoll in the midst of a grove of beautiful trees, and we camped at the edge of a water hole. The pool was almost liquid mud, but we were told that it was the only water supply of the village and its cattle. As though to prove the statement a dozen buffalos ambled slowly down the hill, and stood half submerged in the brown liquid, placidly chewing their cuds; meanwhile blue-clad Shan women with buckets in their hands were constantly arriving at the pond for their evening supply of water. We had no filter and it was nauseating to think of drinking the filthy liquid but there was no alternative and after repeated boiling and several strainings we settled it with alum and disguised its taste in tea and soup.

After dinner we questioned the few natives who spoke Chinese, but we became only more and more confused. They knew of no such place as Ma-li-ling and our Shan guide had discreetly disappeared. But they were familiar with the trail to Ma-li-pa, a village farther west in Burma and, moreover, they said that two hundred foreign soldiers were stationed there. We were quite certain that they must be native Indian troops but thought that a white officer might perhaps be in command.

We did not wish to cross the frontier because of possible political difficulties since we had no permits to shoot in Burma, but there seemed to be no alternative, for we were hopelessly bewildered by the mythical Ma-li-ling. We eventually discovered that there were two villages by that name—one in Burma, and the other in China, where it was correctly placed on the map which we were using.

While we were discussing the matter a tremendous altercation arose between the Chinese *mafus* and the servants. For some time Roy did not interfere, supposing it to be a personal quarrel, but the disturbance at last became unbearable. Calling Wu we learned that because we had been so careful to avoid English territory the *mafus* had conceived the idea that for some reason we were afraid to meet other foreigners. Since we had inadvertently crossed into Burma it appeared to them that it would be an opportune time to extort an increase of wages. They announced, therefore, that unless extra money was given them at once they would untie the loads and leave us.

They were hardly prepared for what followed, however. Taking his Mannlicher rifle, Roy called the *mafus* together and told them that if any man touched a load he would begin to shoot the mules and that if they made the slightest resistance the gun would be turned on them. A *mafus'* mules represent all his property and they did not relish the turn affairs had taken. They subsided at once, but we had the loads guarded during the night. In the morning the *mafus* were exceedingly surprised when they learned that we were going to Ma-li-pa and their change of front was

laughable; they were as humble and anxious to please as they had been belligerent the night before.

The trail led over the same treeless rolling hills through which we had passed on the previous afternoon. There was only one village, but it was surrounded by poppy fields in full blossom. It must be a rather difficult matter for a native living in China near the border to understand why he should not be allowed to produce the lucrative opium while only a few yards away, over an imaginary line, it can be planted without restriction. Poppies seem to grow on hillsides better than on level ground. The plants begin to blossom in late February and the petals, when about to fall, are collected for the purpose of making "leaves" with which to cover the balls of opium. The seed pods which are left after the petals drop off are scarified vertically, at intervals of two or three days, by means of a sharp cutting instrument. The operation is usually performed about four o'clock in the afternoon, and the opium, in the form of dried juice, is collected the next morning. When China, in 1906, forbade the consumption of opium and the growing of poppies, it was estimated that there were from twenty-five to thirty millions of smokers in the Empire.

We reached Ma-li-pa about one o'clock in the afternoon and found it to be a straggling village built on two sides of a deep ravine, with a mixed population of Shans and Chinese. It happened to be the weekly market day and the "bazaar" was crowded. A number of Indian soldiers in khaki were standing about, and I called out to Roy, "I wonder if any of them speak English." Instantly a little fellow approached, with cap in hand, and said, "Yes, Madame, I speak English."

One cannot realize how strange it seemed to hear our own language from a native in this out-of-the-way spot! He was the "compounder," or medical assistant, and told us that the hundred native troops were in charge of a white officer whose house was on the opposite side of the river gorge. He guided us to a temple and, while the mules were being unloaded, in walked a tall, handsome young British officer who introduced himself as Captain Clive. He was almost speechless with surprise at seeing me, for he had not spoken a sentence in English or seen a white person since his arrival at this lonely post five months before.

He asked us at once to come to his quarters for tiffin and we accepted gladly. On the way he gave us our first news of the outside world, for we had been beyond communication of any sort for months, and we learned that the United States had severed diplomatic relations with Germany.

Captain Clive's bungalow was a two-room bamboo house with a broad veranda and thatched with straw. It was delightfully cool and dark after the glare of the yellow sun-baked plains about us, and in perfect order. The care which Britishers take to keep from "letting down" while guarding the frontiers of their vast empire is proverbial, and Captain Clive was a splendid example of the Indian officer. He was as clean-shaved and well-groomed as though he had been expecting us for days and the tiffin to which we sat down was as dainty and well served as it could have been in the midst of civilization.

The great Lord Clive of India was an ancestor of our young officer who had been temporarily detached from his regiment, the 129th Baluchis, and sent on bor-

der duty. He was very unhappy, for his brother officers were in active service in East Africa, and he had tried to resign several times, but the Indian government would not release him. When we reached Rangoon some months later we were glad to learn that he had rejoined his regiment and was at the front. Ma-li-pa was a recently established "winter station" and in May would be abandoned when the troop returned to Lashio, ten days' journey away. Comfortable barracks, cook houses, and a hospital had been erected beside a large space which had been cleaned of turf for a parade ground.

Captain Clive was in communication by heliograph with Lashio, at the end of the railroad, and received a *résumé* of world news two or three times a week. With mirrors during the day and lanterns at night messages were flashed from one mountain top to another and, under favorable conditions, reached Lashio in seven or eight hours.

We pitched our tents a short distance from the barracks in an open field, for there was no available shade. Although Captain Clive was perfectly satisfied with our passports and credentials he could not let us proceed until he had communicated with the Indian government by heliograph. The border was being guarded very closely to prevent German sympathizers from crossing into Burma from China and inciting the native tribes to rebellion.

In December, 1915, a rather serious uprising among the Kachins in the Myitkyina district on the upper waters of the Irawadi River had been incited by a foreigner, I believe, and Clive had assisted in suppressing it. The Indian government was taking no further

chances and had given strict orders to arrest and hold anyone, other than a native, who crossed the border from China.

Very fortunately H. B. M. Consul-General Goffe at Yün-nan Fu had communicated with the Lieutenant-Governor of Burma concerning our Expedition and we consequently expected no trouble, but Captain Clive could not let us proceed until he had orders to do so from the Superintendent of the Northern Shan States. Through a delayed message this permission did not reach him for five days and in the meantime we made the most of the limited collecting resources which Mali-pa afforded.

Clive ordered his day like all the residents of Burma. He rose at six o'clock and after coffee and rolls had drill for two hours. At half past ten a heavy meal took the place of breakfast and tiffin; tea, with sandwiches and toast, was served at three o'clock, and dinner at eight. His company was composed of several different native tribes, and each religious caste had its own cook and water carrier, for a man of one caste could not prepare meals for men of another. It is an extraordinary system but one which appears to operate perfectly well under the adaptable English government. Certainly one of the great elements in the success of the British as colonizers is their respect for native customs and superstitions!

The company drilled splendidly and we were surprised to hear all commands given in English although none of the men could understand that language. This is done to enable British and Indian troops to maneuver together. Captain Clive, himself, spoke Hindustani to his officers. In the evening the men played football

on the parade ground and it seemed as though we had suddenly been transported into civilization on the magic carpet of the Arabian Nights.

Every morning we went shooting at daylight and returned about nine o'clock. Conditions were not favorable for small mammals and although we could undoubtedly have caught a few civets, mongooses, and cats we did not set a line of steel traps for we expected to leave at any time. Our attention was mostly devoted to bird collecting and we obtained about two hundred interesting specimens.

We had our mid-morning meal each day with Captain Clive and he dined with us in the evening. He had brought with him from Lashio a large quantity of supplies and lived almost as well as he could have done at home. Although the days were very warm, the nights were cold and a camp fire was most acceptable.

Captain Clive was on excellent terms with the Chinese authorities and, while we were there, a very old mandarin, blind and infirm, called to present his compliments. He had been an ardent sportsman and was especially interested in our guns; had we been willing to accept the commission he would have paid us the money then and there to purchase for him a Savage .250-.300 rifle like the one we were carrying. The old gentleman always had been very loyal to the British and had received several decorations for his services.

A few days after our arrival a half dead Chinaman crawled into camp with his throat terribly cut. He had been attacked by brigands only a few miles over the border and had just been able to reach Ma-li-pa. The company "compounder" took him in charge and, when Clive asked him about the patient, his evasive answers

were most amusing; like all Orientals he would not commit himself to any definite statement because he might "lose face" if his opinion proved to be wrong.

Captain Clive said to him, "Do you think the Chinaman will die?" Looking very judicial the native replied, "Sir, he *may* die, and yet, he may live." "But," said Clive, "he will probably die, won't he?" "Yes," was the answer, "and yet perhaps he will live." That was all the satisfaction he was able to get.

Clive told us of another native who formerly had been in his company. He had been transferred and one day the Captain met him in Rangoon. When asked if his pay was satisfactory the answer was typical, "Sir, it is good, but not *s-o-o* good!"

On the afternoon of our fourth day in Ma-li-pa a heliograph from Rangoon announced that "The Asiatic Zoölogical Expedition of the American Museum of Natural History is especially commended to His Majesty's Indian Government and permission is hereby granted to carry on its work in Burma wherever it may desire." This was only one of the many courtesies which we received from the British.

The morning following the receipt of the heliogram we broke camp at daylight. When the last mule of the caravan had disappeared over the brown hills toward China we regretfully said farewell and rode away. If we are ever again made "prisoners of war" we hope our captor will be as delightful a gentleman as Captain Clive.

CHAPTER XXXIII

HUNTING PEACOCKS ON THE SALWEEN RIVER

From Ma-li-pa we traveled almost due north to the Salween River. The country through which we passed was a succession of dry treeless hills, brown and barren and devoid of animal life. On the evening of the third day we reached the Salween at a ferry a few miles from the village of Changlung where the river begins its great bend to the eastward and sweeps across the border from China into Burma.

The stream has cut a tremendous gorge for itself through the mountains and the sides are so precipitous that the trail doubles back upon itself a dozen times before it reaches the river 3,500 feet below. The upper half of the gorge is bare or thinly patched with trees, but in the lower part the grass is long and rank and a thin dry jungle straggles along the water's edge. The Salween at this point is about two hundred yards wide, but narrows to half that distance below the ferry and flows in a series of rapids between rocky shores.

The valley is devoid of human life except for three boatmen who tend the ferry, but the deserted rice fields along a narrow shelf showed evidence of former cultivation. On the slopes far up the side of the cañon is a Miao village, a tribe which we had not seen before. Probably the valley is too unhealthy for any natives to live close to the water's edge and, even at the time of

our visit in early March, the heated air was laden with malaria.

The ferrymen were stupid fellows, half drugged with opium, and assured us that there were no mammals near the river. They admitted that they sometimes heard peacocks and, while our tents were being pitched on a steep sand bank beneath a giant tree, the weird catlike call of a peacock echoed up the valley. It was answered by another farther down the river, and the report of my gun when I fired at a bat brought forth a wild "pe-haun," "pe-haun," "pe-haun" from half a dozen places.

The ferry was a raft built of long bamboo poles lashed together with vines and creepers. It floated just above the surface and was half submerged when loaded. The natives used a most extraordinary contrivance in place of oars. It consisted of a piece of tightly woven bamboo matting three feet long and two feet wide at right angles to which was fastened a six-foot handle. With these the men nonchalantly raked the water toward them from the bow and stern when they had poled the raft well into the current. The invested capital was not extensive, for when the ferry or "propellers" needed repairs a few hours' work in the jungle sufficed to build an entirely new outfit.

All of the peacocks were on the opposite side of the river from our camp where the jungle was thickest. On the first morning my wife and I floated down the river on the raft for half a mile and landed to stalk a peacock which had called frequently from a rocky point near the water's edge. We picked our way through the jungle with the utmost caution but the wary old cock either saw or heard us before we were within range,

and I caught just a glimpse of a brilliant green neck as he disappeared into the bushes. A second bird called on a point a half mile farther on, but it refused to come into the open and as we started to stalk it in the jungle we heard a patter of feet among the dry leaves followed by a roar of wings, and saw the bird sail over the tree tops and alight on the summit of a bush-clad hill.

This was the only peacock which we were ever able to flush when it had already gained cover. Usually the birds depend entirely upon their ability to hide or run through the bushes. After several attempts we learned that it was impossible to stalk the peacocks successfully. The jungle was so crisp and parched that the dry leaves crackled at every step and even small birds made a loud noise while scratching on the ground.

The only way to get the peacocks was to watch for them at the river when they came to drink in the early morning and evening. Between two rocky points where we had first seen the birds there was a long curved beach of fine white sand. One morning Heller waited on the point nearest camp while my wife and I posted ourselves under a bush farther down the river. We had been sitting quietly for half an hour when we heard a scratching in the jungle. Thinking it was a peacock feeding we turned our backs to the water and sat motionless peering beneath the bushes. Meanwhile, Heller witnessed an interesting little drama enacted behind us.

An old male peacock with a splendid train stole around the point close to the water, jumped to a high stone within thirty yards of us and stood for a full minute craning its beautiful green neck to get a better view

as we kneeled in front of him totally unconscious of his presence. After he had satisfied his curiosity he hopped off the observation pinnacle and, with his body flattened close to the ground, slipped quietly away. It was an excellent example of the stalker being stalked and had Heller not witnessed the scene we should never have known how the clever old bird had fooled us.

The following morning we got a peahen at the same place. Heller had concealed himself in the bushes on one side of the point while I watched the other. Shortly after daylight an old female sailed out of the jungle on set wings and alighted at the water's edge. She saw Heller almost instantly, although he was completely covered by the vines, and started to fly, but he dropped her with a broken wing. Recovering herself, she darted around the rocky point only to meet a charge of B.B.'s from my gun. She was a beautiful bird with a delicate crown of slender feathers, a yellow and blue face patch and a green neck and back, but her plumes were short and inconspicuous when compared with those of the male.

Probably these birds had never before been hunted but they were exceedingly shy and difficult to kill. Although they called more or less during the entire day and we could locate them exactly, they were so far back in the jungle that the crackling of the dry leaves made a stalk impossible. We tried to drive them but were unsuccessful, for the birds would never flush unless they happened to be in the open and cut off from cover. Apparently realizing that their brilliant plumage made them conspicuous objects, the birds relied entirely upon an actual screen of bushes and their wonderful sight and hearing to protect themselves from enemies.

They usually came to the river to drink very early in the morning and just before dusk in the afternoon, but on cloudy days they might appear at almost any hour. If undisturbed they would remain near the water's edge for a considerable time or strut about the sand beach just at the edge of the jungle. At the sound of a gun or any other loud sharp noise the peacocks would answer with their mournful catlike wail, exactly as the domesticated birds will do.

The Chinese believe that the flesh of the peafowl is poison and our servants were horrified when they learned that we intended to eat it. They fully expected that we would not survive the night and, even when they saw we had experienced no ill effects, they could not be persuaded to touch any of it themselves. An old peacock is too tough to eat, but the younger birds are excellent and when stuffed with chestnuts and roasted they are almost the equal of turkey.

The species which we killed on the Salween River is the green peafowl (*Pavo munticus*) which inhabits Burma, Sumatra, Java, and the Malay Peninsula. Its neck is green, instead of purple, as is that of the common Indian peacock (*Pavo cristatus*), and it is said that it is the most beautiful bird of the world.

The long ocellated tail coverts called the "train" are dropped about August and the birds assume more simple barred plumes, but the molt is very irregular; usually the full plumage is resumed in March or even earlier. The train is, of course, an ornament to attract the female and, when a cock is strutting about with spread plumes, he sometimes makes a most peculiar rustling sound by vibrating the long feathers.

The eight or ten eggs are laid on the bare ground

under a bush in the dense jungle, are dull brownish white and nearly three inches long. The chicks are sometimes domesticated, but even when born in captivity, it is said they are difficult to tame and soon wander away. The birds are omnivorous, feeding on insects, grubs, reptiles, flower buds, young shoots, and grain.

The common peafowl (*Pavo cristatus*) is a native of India, Ceylon, and Assam. It is held sacred by some religious castes and we saw dozens of the birds wandering about the grounds of the temples in Benares, Agra, and Delhi. Peafowl are said to be rather disagreeable pets because they often attack infirm persons and children and kill young poultry.

In some parts of Ceylon and India the birds are so abundant and easily killed that they do not furnish even passable sport, but in other places they are as wild and difficult to shoot as we found them to be on the Salween River. In India it is a universal belief among sportsmen that wherever peafowls are common, there tiger will be found.

A very beautiful variety which seems to have arisen abruptly in domestication is the so-called "japanned" or black-shouldered peacock named *Pavo nigripennis* by Mr. Sclater. In some respects it is intermediate between *P. muticus* and *P. cristatus* and apparently "breeds true" but never has been found in a wild state. Albino specimens are by no means unusual and are a feature of many zoölogical gardens.

Peacocks have been under domestication for many centuries and are mentioned in the Bible as having been imported into Palestine by Solomon; although the bird is referred to in mythology, the Greeks probably had but

little knowledge of it until after the conquests of Alexander.

In the thick jungle only a few hundred yards from our camp on the Salween River I put up a silver pheasant (*Euplocamus nycthemerus*), one of the earliest known and most beautiful species of the family Phasianidæ. Its white mantle, delicately vermiculated with black, extends like a wedding veil over the head, back and tail, in striking contrast to the blue-black underparts, red cheek patches, and red legs.

This bird was formerly pictured in embroidery upon the heart and back badges of the official dresses of civil mandarins to denote the rank of the wearer, and is found only in southern and western China. It is by no means abundant in the parts of Yün-nan which we visited and, moreover, lives in such dense jungle that it is difficult to find. The natives sometimes snare the birds and offer them for sale alive.

We also saw monkeys at our camp on the Salween River, but were not successful in killing any. They were probably the Indian baboon (*Macacus rhesus*) and, for animals which had not been hunted, were most extraordinarily wild. They were in large herds and sometimes came down to the water to skip and dance along the sand and play among the rocks. The monkeys invariably appeared on the opposite side of the river from us and by the time we hunted up the boatmen and got the clumsy raft to the other shore the baboons had disappeared in the tall grass or were merrily running through the trees up the mountain-side.

The valley was too dry to be a very productive trapping ground for either small or large mammals, but the birds were interesting and we secured a good many

species new to our collection. Jungle fowl were abundant and pigeons exceedingly so, but we saw no ducks along the river and only two cormorants.

Very few natives crossed at the ferry during our stay, for it is a long way from the main road and the climb out of the gorge is too formidable to be undertaken if the Salween can possibly be crossed higher up where the valley is wide and shallow. While we were camped at the river the heat was most uncomfortable during the middle of the day and was but little mitigated by the wind which blew continually. During mid-summer the valley at this point must be a veritable furnace and doubtless reeks with fever. We slept under nets at night and in the early evening, while we were watching for peacocks, the mosquitoes were very troublesome.

CHAPTER XXXIV

THE GIBBONS OF HO-MU-SHU

It is a long hard climb out of the Salween valley. We left on March 24 and all day crawled up the steep sides on a trail which doubled back and forth upon itself like an endless letter S. From our camp at night the river was just visible as a thin green line several thousand feet below, and for the first time in days, we needed a charcoal fire in our tents.

We were *en route* to Lung-ling, a town of considerable size, where there was a possibility that mail might be awaiting us in care of the mandarin. Although ordinarily a three days' journey, it was more than four days before we arrived, because I had a sharp attack of malaria shortly after leaving the Salween River and we had to travel half stages.

When we were well out of the valley and at an altitude of 5,000 feet, we arrived at a Chinese town. Its dark evil-smelling houses, jammed together in a crowded mass, and the filthy streets swarming with ragged children and foot-bound women, were in unpleasant contrast to the charming little Shan villages which we had seen in the low country. The inhabitants themselves appeared to no better advantage when compared with their Shan neighbors, for their stares and insolent curiosity were almost unbearable.

The region between the Salween River at Chang-lung and Lung-ling is as uninteresting to the zoölogist

as it could possibly be, for the hills are dry and bare and devoid of animal life. Lung-ling is a typical Chinese town except that the streets are wide and it is not as dirty as usual. The mandarin was a jolly rotund little fellow who simulated great sympathy when he informed me that he had received no mail for us. We had left directions to have a runner follow us from Yung-chang and in the event that he did not find our camp to proceed to Lung-ling with the mail. We learned some weeks later that the runner had been frightened by brigands and had turned back long before he reached Meng-ting.

We had heard from our *mafus* and other natives that black monkeys were to be found on a mountain pass not far from the village of Ho-mu-shu, on the main Yung-chang-Teng-yueh road and, as we were certain that they would prove to be gibbons, we decided to make that our next hunting camp. It was three stages from Lung-ling and, toward evening of the second day, we again descended to the Salween River.

The valley at this point is several miles wide and is so dry that the few shrubs and bushes seem to be parched and barely able to live. At the upper end a picturesque village is set among extensive rice fields. Although a few Chinese live there, its inhabitants are chiefly Shans who are in a transitory state and are gradually adopting Chinese customs. The houses are joined to each other in the Chinese way and are built of mud, thatched with straw. In shape as well as in composition they are quite unlike the dwellings of the southern Shans. The women wore cylindrical turbans, about eighteen inches high, which at a distance looked like silk hats, and the men were dressed in narrow trousers and jackets of Chinese

blue. I believe that some of the Shan women also had bound feet but of this I cannot be certain.

We camped on a little knoll under an enormous tree at the far end of the village street, and a short time after the tents were up we had a visit from the Shan magistrate. He was a dapper energetic little fellow wearing foreign dress and quite *au courant* with foreign ways. He even owned a breech-loading shotgun, and, before we left, sent to ask for shells. He presented us with the usual chickens and I returned several tins of cigarettes. He appeared to be quite a sportsman and directed us to a place on the mountain above the village where he said monkeys were abundant.

We left early in the morning with a guide and, after a hard climb, arrived at a little village near the forest to which the magistrate had directed us. Not only did the natives assure us that they had never seen monkeys but we discovered for ourselves that the only water was more than a mile away, and that camping there was out of the question.

The next day, April 1, we went on to Ho-mu-shu. It is a tiny village built into the mountain-side with hardly fifty yards of level ground about it, but commanding a magnificent view over the Salween valley. Although we reached there at half past two in the afternoon the *mafus* insisted on camping because they swore that there was no water within fifty *li* up the mountain. Very unwillingly I consented to camp and the next morning found, as usual, that the *mafus* had lied for there was a splendid camping place with good water not two hours from Ho-mu-shu. It was useless to rage for the Chinese have no scruples about honesty in such small matters, and the head *mafu* blandly admitted that he

knew there was a camping place farther on but that he was tired and wanted to stop early.

As we gained the summit of the ridge we were greeted with a ringing "hu-wa," "hu-wa," "hu-wa," from the forest five hundred feet below us; they were the calls of gibbons, without a doubt, but strikingly unlike those of the Nam-ting River. We decided to camp at once and, after considerable prospecting, chose a flat place beside the road. It was by no means ideal but had the advantage of giving us an opportunity to hunt from either side of the ridge which for its entire length was scarcely two hundred feet in width. The sides fell away for thousands of feet in steep forest-clad slopes and, as far as our eyes could reach, wave after wave of mountains rolled outward in a great sea of green.

Our camp would have been delightful except for the wind which swept across the pass night and day in an unceasing gale. My wife and I set a line of traps along a trail which led down the north side of the ridge, while Heller chose the opposite slope. We were entranced with the forest. The trees were immense spreading giants with interlaced branches that formed a solid roof of green 150 feet above the soft moss carpet underneath. Every trunk was clothed in a smothering mass of vines and ferns and parasitic plants and, from the lower branches, thousands of ropelike creepers swayed back and forth with every breath of wind. Below, the forest was fairly open save for occasional patches of dwarf bamboo, but the upper canopy was so close and dense that even at noon there was hardly more than a somber twilight beneath the trees.

Our first night on the pass was spent in a terrific gale which howled up the valley from the south and swept

across the ridge in a torrent of wind. The huge trees around us bent and tossed, and our tents seemed about to be torn to shreds. Amid the crashing of branches and the roar of the wind it was impossible to hear each other speak and sleep was out of the question. We lay in our bags expecting every second to have the covering torn from above our heads, but the tough cloth held, and at midnight the gale began to lull. In the morning the sun was out in a cloudless sky but the wind never ceased entirely on the pass even though there was a breathless calm among the trees a few hundred feet below.

My wife and I had just returned from inspecting our line of traps about nine o'clock in the morning when the forest suddenly resounded with the "hu-wa," "hu-wa," "hu-wa" of the gibbons. It seemed a long way off at first, but sounded louder and clearer every minute. At the first note we seized our guns and dashed down the mountain-side, slipping, stumbling, and falling. The animals were in the giant forest about five hundred feet below the summit of the ridge and as we neared them we moved cautiously from tree to tree, going forward only when they called. It was one of the most exciting stalks I have ever made, for the wild, ringing howls seemed always close above our heads.

We were still a hundred yards away when a huge black monkey leaped out of a tree top just as I stepped from behind a bush, and he saw me instantly. For a full half minute he hung suspended by one arm, his round head thrust forward staring intently; then launching himself into the air as though shot from a catapult he caught a branch twenty feet away, swung to another, and literally flew through the tree tops. Without a sound save the

swish of the branches and splash after splash in the leaves, the entire herd followed him down the hill. It was out of range for the shotgun and my wife was ten feet behind me with the rifle, but had I had it in my hand I doubt if I could have hit one of those flying balls of fur.

We returned to camp with sorrow in our hearts, but two days later we redeemed ourselves and brought in the first new gibbons. We were sitting on a bed of fragrant pine needles watching for a squirrel which had been chattering in the upper branches of a giant tree, when suddenly the wild call of the monkeys echoed up the mountain-side.

They were far away to the left, and we ran toward them, stumbling and slipping on the moss-covered rocks and logs, the "hu-wa," "hu-wa," "hu-wa" sounding louder every moment. They seemed almost under us at times and we would stand motionless and silent only to hear the howls die away in the distance. At last we located them on the precipitous side of a deep gorge filled with an impenetrable jungle of palms and thorny plants. It was an impossible place to cross, and we sat down, irresolute and discouraged. In a few moments a chorus of howls broke out and we saw the big black apes swinging along through the trees, two hundred yards away. Finally they stopped and began to feed. They were small marks at that distance but I rested my little Mannlicher on a stump and began to shoot while Yvette watched them with the glasses. One big fellow swung out on a branch and hung with one arm while he picked a cluster of leaves with the other. Yvette saw my first shot cut a twig above his head but he did not move, and at the roar of the second he dropped

heavily into the vines below. A brown female ran along the branch a few seconds later and peered down into the jungle where the first monkey had fallen. I covered her carefully with the ivory head of the front sight, pulled the trigger, and she pitched headlong off the tree.

For a few seconds there was silence, then a splash of leaves and three huge black males leaped into full view from the summit of a tall tree. They were silhouetted against a patch of sky and I fired twice in quick succession registering two clean misses. The bullets must have whizzed too close for comfort and they faded instantly into the forest like three black shadows.

For ten minutes we strained our eyes into the dense foliage hoping to catch a glimpse of a swaying branch. Suddenly Yvette heard a rustling in the low tree beneath which we were sitting and seized me violently by the arm, screaming excitedly, "There's one, right above us. Quick, quick, he's going!"

I looked up and could hardly believe my eyes for not twenty feet away hung a huge brown monkey half the size of a man. Almost in a daze I fired with the shotgun. The gibbon stopped, slowly pivoted on one long arm and a pair of eyes blazing like living coals, stared into mine. I fired again point blank as the huge mouth, baring four ugly fangs, opened and emitted a blood-curdling howl. The monkey slowly swung back again, its arm relaxed and the animal fell at my feet, stone dead.

It was a magnificent old female. By a lucky chance we had chosen, from all the trees in the forest, to sit under the very one in which the gibbon had been hiding and she had tried to steal away unnoticed.

While my wife waited to direct me from the rim of the gorge, I climbed down into the jungle to try and make my way up the opposite side where the other monkeys had fallen. It was dangerous work, for the rocks were covered with a thin layer of earth which supported a dense growth of vegetation. If I tried to let myself down a steep slope by clinging to a thick fern it would almost invariably strip away with a long layer of dirt and send me headlong.

After two bad falls I reached the bottom of the ravine where a mountain torrent leaped and foamed over the rocks and dropped in a beautiful cascade to a pool fifty or sixty feet below. The climb up the opposite side was more difficult than the descent and twice I had to return after finding the way impassable.

A sheer, clean wall almost seventy feet high separated me from the spot where the gibbons had fallen. I skirted the rock face and had laboriously worked my way around and above it when a vine to which I had been clinging stripped off and I began to slide. Faster and faster I went, dragging a mass of ferns and creepers with me, for everything I grasped gave way.

I thought it was the end of things for me because I was hardly ten feet above the precipice which fell away to the jagged rocks of the stream bed in a drop of seventy feet. The rifle slung to my back saved my life. Suddenly it caught on a tiny ragged ledge and held me flattened out against the cliff. But even then I was far from safe, as I realized when I tried to twist about to reach a rope of creepers which swung outward from a bush above my head.

How I managed to crawl back to safety among the trees I can remember only vaguely. I finally got down

A Suspension Bridge

Mrs. Andrews Feeding One of Our Bear Cubs

to the bottom of the cañon, but felt weak and sick and it was half an hour before I could climb up to the place where my wife was waiting. She was already badly frightened for she had not seen me since I left her an hour before and, when I answered her call, she was about to follow into the jungle where I had disappeared. We left the two monkeys to be recovered from above and went slowly back to camp.

The gibbons of Ho-mu-shu are quite unlike those of the Nam-ting River. They represent a well-known species called the "hoolock" (*Hylobates hoolock*) which is also found in Burma.

The males, both old and young, are coal black with a fringe of white hairs about the face, and the females are light brown. Their note is totally unlike the Nam-ting River gibbons and, instead of sitting quietly in the top of a dead tree to call to their neighbors across the jungle for an hour or two, the hoolocks howl for about twenty minutes as they swing through the branches and are silent during the remainder of the day. They called most frequently on bright mornings and we seldom heard them during cloudy weather.

Apparently they had regular feeding grounds, which were visited every day, but the herds seemed to cover a great deal of territory. Like the gibbons of the Nam-ting River, the hoolocks traveled through the tree tops at almost unbelievable speed, and one of the most amazing things which I have ever witnessed was the way in which they could throw themselves from one tree to another with unerring precision.

On April 5, we received the first mail in nearly three months and our share amounted to 105 letters besides a great quantity of magazines. Wu had ridden to Teng-

yueh for us and, as well as the greatly desired mail, had a basket of delicious vegetables and a sheaf of Reuter's cablegrams which were kindly sent by Messrs. Palmer and Abertsen, gentlemen in the employ of the Chinese Customs, who had cared for our mail. Mr. Abertsen also sent a note telling us of a good hunting ground near Teng-yueh.

We spent an entire afternoon and evening over our letters and papers and, through them, began to get in touch with the world again. It is strange how little one misses the morning newspaper once one is beyond its reach and has properly adjusted one's mental perspective. And it is just as strange how essential it all seems immediately one is again within reach of such adjuncts of civilization.

On April 6, we had the first rain for weeks. The water fell in torrents, and the roar, as it drummed upon the tent, was so incessant that we could barely hear each other shout. Because of the long dry spell our camp had not been made with reference to weather and during the night I waked to find that we were in the middle of a pond with fifteen inches of water in the tent. Shoes, clothes, guns, and cameras were soaked, and the surface of the water was only an inch below the bottoms of our cots. This was the beginning of a ten days' rain after which we had six weeks of as delightful weather as one could wish.

CHAPTER XXXV

TENG-YUEH; A LINK WITH CIVILIZATION

After a week on the pass above Ho-mu-shu we shifted camp to a village called Tai-ping-pu, ten miles nearer Teng-yueh on the same road. The ride along the summit of the mountain was a delight, for we passed through grove after grove of rhododendrons in full blossom. The trees were sometimes thirty feet in height and the red flowers glowed like clusters of living coals among their dark green leaves. In the northern part of Yün-nan the rhododendrons grow above other timber line on mountains where it is too high even for spruces.

It rained continually during our stay at Tai-ping-pu. I had another attack of the Salween malaria and for five or six days could do little work. Heller, however, made good use of his time and killed a beautiful horned pheasant, Temmick's tragopan (*Ceriornis temminckii*), besides half a dozen langurs of the same species as those we had collected on the Nam-ting River. He also was fortunate in shooting one of the huge flying squirrels (*Petaurista yunnanensis*) which we had hoped to get at Wei-hsi. He saw the animal in the upper branches of a dead tree on the first evening we were in Tai-ping-pu but was not able to get a shot. The next night he watched the same spot and killed the squirrel with a charge of "fours." It measured forty-two and one-quarter inches from the nose to the end of the tail and was a rich mahogany red grizzled with whitish above; the

underparts were cream white. As in all flying squirrels, the four legs were connected by a sheet of skin called the "patagium" which is continuous with the body. This acts as a parachute and enables the animal to sail from tree to tree for, of course, it cannot fly like a bat. As these huge squirrels are strictly nocturnal, they are not often seen even by the natives. We were told by the Lutzus on the Mekong River that by building huge fires in the woods they could attract the animals and shoot them with their crossbows.

A few weeks later we purchased a live flying squirrel from a native and kept it for several days in the hope that it might become tame. The animal was exceedingly savage and would grind its teeth angrily and spring at anyone who approached its basket. It could not be tempted to eat or drink and, as it was a valuable specimen, we eventually chloroformed it.

Just below our camp in a pretty little valley a half dozen families of Lisos were living, and we hired the men to hunt for us. They were good-natured fellows, as all the natives of this tribe seem to be, and worked well. One day they brought in a fine muntjac buck which had been killed with their crossbows and poisoned darts. The arrows were about twelve inches long, made of bamboo and "feathered" with a triangular piece of the same wood. Those for shooting birds and squirrels were sharpened to a needle point, but the hunting darts were tipped with steel or iron. The poison they extracted from a plant, which I never saw, and it was said that it takes effect very rapidly.

The muntjac which the Lisos killed had been shot in the side with a single arrow and they assured us that only the flesh immediately surrounding the wound had

been spoiled for food. These natives like the Mosos, Lolos, and others carried their darts in a quiver made from the leg skin of a black bear, and none of the men wished to sell their weapons; I finally did obtain a crossbow and quiver for six dollars (Mexican).

Two days before we left Tai-ping-pu, three of the Lisos guided my wife and me to a large cave where they said there was a colony of bats. The cavern was an hour's ride from camp, and proved to be in a difficult and dangerous place in the side of a cliff just above a swift mountain stream. We strung our gill net across the entrance and then sent one of the natives inside to stir up the animals while we caught them as they flew out. In less than half an hour we had twenty-eight big brown bats, but our fingers were cut and bleeding from the vicious bites of their needle-like teeth. They all represented a widely distributed species which we had already obtained at Yün-nan Fu.

From Lung-ling I had sent a runner to Mr. Evans at Ta-li Fu asking him to forward to Teng-yueh the specimens which we had left in his care, and the day following our visit to the bat cave the caravan bearing our cases passed us at Tai-ping-pu. We, ourselves, were about ready to leave and two days later at ten o'clock in the morning we stood on a precipitous mountain summit, gazing down at the beautiful Teng-yueh plain which lay before us like a relief map. It is as flat as a plain well can be and, except where a dozen or more villages cluster on bits of dry land, the valley is one vast watery rice field. Far in the distance, outside the gray city walls, we could see two temple-like buildings surrounded by white-walled compounds, and

Wu told us they were the houses of the Customs officials.

Teng-yueh, although only given the rank of a "ting" or second-class Chinese city, is one of the most important places in the province, for it stands as the door to India. All the trade of Burma and Yün-nan flows back and forth through the gates of Teng-yueh, over the great caravan road to Bhamo on the upper Irawadi.

An important post of the Chinese Foreign Customs, which are administered by the British government as security for the Boxer indemnity, is situated in this city, and we were looking forward with the greatest interest to meeting its white population. At the time of our visit the foreigners included Messrs. H. G. Fletcher and Ralph C. Grierson, respectively Acting Commissioner and Assistant Commissioner of Customs; Messrs. W. R. Palmer and Abertsen, also of the Customs; Mr. Eastes, H. B. M. Consul; Dr. Chang, Indian Medical Officer, and Reverend and Mrs. Embry of the China Inland Mission; Mr. Eastes, accompanied by the resident mandarin, was absent on a three months' opium inspection tour so that we did not meet him.

We reached Teng-yueh on Sunday morning and camped in a temple outside the city walls. Immediately after tiffin we called upon Mr. Grierson and went with him to the Customs House where Messrs. Abertsen and Palmer were living. We found there a Scotch botanist, Mr. Forrest, an old traveler in Yün-nan who was *en route* to A-tun-zu on a three-year plant-hunting expedition for an English commercial firm. We had heard much of Forrest from Messrs. Kok and Hanna and were especially glad to meet him because of his

wide knowledge of the northwestern part of the province. Mr. Forrest was interested chiefly in primroses and rhododendrons, I believe, and in former years obtained a rather remarkable collection of these plants.

From Mr. Grierson we first learned that the United States had declared war on Germany. It had been announced only a week before, and the information had reached Teng-yueh by cable and telegraph almost immediately. It came as welcome news to us Americans who had been vainly endeavoring to justify to ourselves and others our country's lethargy in the face of Teuton insolence, and made us feel that once again we could acknowledge our nationality with the pride we used to feel.

On Monday Mr. Grierson invited us to become his guests and to move our caravan and belongings to his beautiful home. We were charmed with it and our host. The house was built with upturned, temple-like gables, and from his cool verandah we could look across an exquisite flower-filled garden to the blue mountains from which we had had our first view of Teng-yueh the day before. The interior of the dwelling was as attractive as its surroundings, and the beautifully served meals were as varied and dainty as one could have had in the midst of a great city.

Like all Britishers, the Customs men had carried their sport with them. Just beyond the city walls an excellent golf course had been laid out with Chinese graves as bunkers, and there was a cement tennis court behind the Commissioner's house. Mr. Grierson had two excellent polo ponies, besides three trained pointer dogs, and riding and shooting over the beautiful hills gave him an almost ideal life. We found that Mr. Fletcher

had a really remarkable selection of records and an excellent Victrola. After dinner, as we listened to the music, we had only to close our eyes and float back to New York and the Metropolitan Opera House on the divine harmony of the sextet from "Lucia" or Caruso's matchless voice. But none of us wished to be there in body for more than a fleeting visit at least, and the music already brought with it a lingering sadness because our days in the free, wild mountains of China were drawing to a close.

During the week we spent with Mr. Grierson we dried and packed all our specimens in tin-lined boxes which were purchased from the agent of the British American Tobacco Company in Teng-yueh. They were just the right size to carry on muleback and, after the birds and mammals had been wrapped in cotton and sprinkled with napthalene, the cases were soldered and made air tight. The most essential thing in sending specimens of any kind through a moist, tropical climate such as India is to have them perfectly dry before the boxes are sealed; otherwise they will arrive at their destination covered with mildew and absolutely ruined.

On the day of our arrival in Teng-yueh we purchased from a native two bear cubs (*Ursus tibetanus*) about a week old. Each was coal black except for a V-shaped white mark on the breast and a brown nose. When they first came to us they were too young to eat and we fed them diluted condensed milk from a spoon.

The little chaps were as playful as kittens and the story of their amusing ways as they grew older is a book in itself. After a month one of the cubs died, leaving great sorrow in the camp; the other not only lived and flourished but traveled more than 16,000 miles.

He went with us on a pack mule to Bhamo, down the Irawadi River to Rangoon, and across the Bay of Bengal to Calcutta. He then visited many cities in India, and at Bombay boarded the P. & O. S. S. *Namur* for Hongkong and became the pet of the ship. From China we took him to Japan, across the Pacific to Vancouver, and finally to our home at Lawrence Park, Bronxville, New York. After an adventurous career as a house pet, when his exploits had made him famous and ourselves disliked by all the neighbors, we regretfully sent him to the National Zoölogical Park, Washington, D. C., where he is living happily at the present time. He was the most delightful little pet we have ever owned and, although now he is nearly a full grown bear, his early life is perpetuated in motion pictures and we can see him still as he came to us the first week. He might well have been the model for the original "Teddy Bear" for he was a round ball of fur, mostly head and ears and sparkling little eyes.

CHAPTER XXXVI

A BIG GAME PARADISE

A FEW months previous to our arrival, Mr. Abertsen had discovered a splendid hunting ground near the village of Hui-yao, about eighty *li* from Teng-yueh. He had been shooting rabbits and pheasants and, while passing through the village, the natives told him that a large herd of *gnai-yang* or "wild goats" lived on the side of a hill through which a branch of the Shweli River had cut a deep gorge.

Although Abertsen was decidedly skeptical as to the accuracy of the report he spent two days hunting and with his shotgun killed two gorals; moreover, he saw twenty-five others. We examined the two skins and realized at once that they represented a different species from those of the Snow Mountain. Therefore, when we left Teng-yueh our first camp was at Hui-yao.

Heller and I started with four natives shortly after daylight. We crossed a tumbledown wooden bridge over the river at a narrow cañon where the sides were straight walls of rock, and followed down the gorge for about two miles. On the way Heller, who was in front, saw two muntjac standing in the grass on an open hillside, and shot the leader. The deer pitched headlong but got to its feet in a few moments and struggled off into the thick cover at the edge of the meadow. It had disappeared before Heller reached the clearing but he saw the second deer, a fine doe, standing on a rock.

Although his bullet passed through both lungs the animal ran a quarter of a mile, and he finally discovered her several hours later in the bushes beside the river.

In a short time we reached an open hillside which rose six or seven hundred feet above the river in a steep slope; the opposite side was a sheer wall of rock bordered on the rim by an open pine forest. We separated at this point. Heller, with two natives, keeping near the river, while I climbed up the hill to work along the cliffs half way to the summit.

In less than ten minutes Heller heard a loud snort and, looking up, saw three gorals standing on a ledge seventy-five yards above him. He fired twice but missed and the animals disappeared around a corner of the hill. A few hundred yards farther on he saw a single old ram but his two shots apparently had no effect.

Meanwhile I had continued along the hillside not far from the summit for a mile or more without seeing an animal. Fresh tracks were everywhere and well-cut trails crossed and recrossed among the rocks and grass. I had reached an impassable precipice and was returning across a steep slope when seven gorals jumped out of the grass where they had been lying asleep. I was in a thick grove of pine trees and fired twice in quick succession as the animals appeared through the branches, but missed both times.

I ran out from the trees but the gorals were then nearly two hundred yards away. One big ram had left the herd and was trotting along broadside on. I aimed just in front of him and pulled the trigger as his head appeared in the peep sight. He turned a beautiful somersault and rolled over and over down the hill, finally disappearing in the bushes at the edge of the water.

The other gorals had disappeared, but a few seconds later I saw a small one slowly skirting the rocks on the very summit of the hill. The first shot kicked the dirt beside him, but the second broke his leg and he ran behind a huge boulder. I rested the little Mannlicher on the trunk of a tree, covering the edge of the rock with the ivory head of the front sight and waited. I was perfectly sure that the goral would try to steal out, and in two or three minutes his head appeared. I fired instantly, boring him through both shoulders, and he rolled over and over stone dead lodging against a rock not fifty yards from where we stood.

The two natives were wild with excitement and, yelling at the top of their lungs, ran up the hill like goats to bring the animal down to me. It was a young male in full summer coat, and with horns about two inches long. Our pleasure was somewhat dampened, however, when we went to recover the first goral for we found that when it had landed in the grass at the edge of the river it had either rolled or crawled into the water. We searched along the bank for half a mile but without success and returned to Hui-yao just in time for tiffin.

In the afternoon we shifted camp to a beautiful little grove on the opposite side of the river behind the hunting grounds. Heller, instead of going over with the caravan, went back along the rim of the gorge in the pine forest where he could look across the river to the hill on which we had hunted in the morning. With his field glasses he discovered five gorals in an open meadow, and opened fire. It was long shooting but the animals did not know which way to run, and he killed three of the herd before they disappeared. Our first day had,

therefore, netted us one deer and four gorals which was better than at any other camp we had had in China.

We realized from the first day's work that Hui-yao would prove to be a wonderful hunting ground, and the two weeks we spent there justified all our hopes. At other places the cover was so dense or the country so rough that it was necessary to depend entirely upon dogs and untrained natives, but here the animals were on open hillsides where they could be still hunted with success. Moreover, we had an opportunity to learn something about the habits of the animals for we could watch them with glasses from the opposite side of the river when they were quite unconscious of our presence.

There was only one day of our stay at Hui-yao that we did not bring in one or more gorals and even after we had obtained an unrivaled series, dozens were left. Shooting the animals from across the river was rather an unsportsmanlike way of hunting but it was a very effective method of collecting the particular specimens we needed for the Museum series. The distance was so great that the gorals were unable to tell from where the bullets were coming and almost any number of shots might be had before the animals made for cover. It became simply a case of long range target shooting at seldom less than three hundred yards.

Still hunting on the cliffs was quite a different matter, however, and was as good sport as I have ever had. The rocks and open meadow slopes were so precipitous that there was very real danger every moment, for one misstep would send a man rolling hundreds of feet to the bottom where he would inevitably be killed.

The gorals soon learned to lie motionless along the sheerest cliffs or to hide in the rank grass, and it took

close work to find them. I used most frequently to ride from camp to the river, send back the horse by a *mafu,* and work along the face of the rock wall with my two native boys. Their eyesight was wonderful and they often discovered gorals lying among the rocks when I had missed them entirely with my powerful prism binoculars. Their eyes had never been dimmed by study and I suppose were as keen as those of primitive man who possibly hunted gorals or their relatives thousands of years ago over these same hills.

There were many glorious hunts and it would be wearisome were I to describe them all, but one afternoon stands out in my memory above the others. It was a brilliant day, and about four o'clock I rode away from camp, across the rice fields and up the grassy valley to the long sweep of open meadow on the rim of the river gorge.

Sending back the horse, "Achi," my native hunter, and I crawled carefully to a jutting point of rocks and lay face down to inspect the cliffs above and to the left. With my glasses I scanned every inch of the gray wall, but could not discover a sign of life. Glancing at Achi I saw him gazing intently at the rock which I had just examined, and in a moment he whispered excitedly *"gnai-yang."* By putting both hands to the side of his head he indicated that the animal was lying down, and although he pointed with my rifle, it was full five minutes before I could discover the goral flat upon his belly against the cliff, with head stretched out, and fore legs doubled beneath his body. He was sound asleep in the sun and looked as though he might remain forever.

By signs Achi indicated that we were to climb up above and circle around the cliff to a ragged promon-

A Sambur Killed at Wa-tien

The Head of a Muntjac

tory which jutted into space within a hundred yards of the animal. It was a good three quarters of an hour before we peered cautiously between two rocks opposite the ledge where the goral had been asleep. The animal was gone. We looked at each other in blank amazement and then began a survey of the ground below.

Halfway down the mountain-side Achi discovered the ram feeding in an open meadow and we began at once to make our way down the face of the cliff. It was dangerous going, but we gained the meadow in safety and worked cautiously up to a grassy ridge where the goral had been standing. Again we crawled like snakes among the rocks and again an empty slope of waving grass met our eyes. The goral had disappeared, and even Achi could not discover a sign of life upon the meadow.

With an exclamation of disgust I got to my feet and looked around. Instantly there was a rattle of stones and a huge goral leaped out of the grass thirty yards away and dashed up the hill. I threw up my rifle and shot hurriedly, chipping a bit of rock a foot behind the animal. Swearing softly at my carelessness, I threw in another shell, selected a spot in front of the ram, and fired. The splendid animal sank in its tracks without a quiver, shot through the base of the neck.

I had just ejected the empty shell when Achi seized me by the arm, whispering *"gnai-yang, gnai-yang, gnai-yang, na, na, na, na,"* and pointing to the cliffs two hundred yards above us. I looked up just in time to see another goral flash behind a rock on the very summit of the ridge. An instant later he appeared again and stopped broadside on with his noble head thrown up,

silhouetted against the sky. It was a perfect target and, resting my rifle on a flat rock, I covered the animal with the white bead and centered it in the rear sight. As I touched the hair trigger and the roar of the high-power shell crashed back from the face of the cliff, the animal leaped with legs straight out, whirling over and over down the meadow and bringing up against a boulder not twenty yards from the first goral.

That night as I walked over the hills in the cool dusk I would not have changed my lot with any man on earth. The breathless excitement of the stalk and the wild thrill of exultation at the clean kill of two splendid rams were still rioting in my veins. I came out of the valley and across the rice fields to the blazing camp fire. Yvette ran to the edge of the grove, her hands filled with wet photographic negatives. "How many?" she called. "Two," I answered, "and both big ones. How many for you?" "Fourteen color plates," she sung back happily, "and all good."

CHAPTER XXXVII

SEROW AND SAMBUR

We had a delightful visit from Mr. Grierson during our first week in camp. He rode out on Thursday afternoon and remained until Sunday, bringing us mail, war news, and fresh vegetables, and returning with goral meat for all the foreigners in Teng-yueh. On the afternoon of his visit I had killed three monkeys which represented a different species from any we had obtained before. They were the Indian baboon (*Macacus rhesus*) and were probably like those of the Salween River at Changlung.

I found two great troupes of the monkeys running along the opposite river bank. The first herd was climbing up the almost perpendicular rock walls, swinging on the bushes and sometimes almost disappearing in the tufts of grass. I could not approach nearer than one hundred and fifty yards and did some very bad shooting at the little beasts, but a running monkey at that distance is a pretty uncertain mark, and it requires a much better shot than I am to register more hits than misses. I did kill two, but both dropped into the river and promptly sank, so that I gave it up.

Less than a half mile farther on another and larger troupe appeared among the boulders just at the water's edge. Profiting by my experience, I kept out of sight among the bushes and watched the animals play about until one hopped to a rock and sat quietly for an instant.

I got six in this way, but we were able to recover only three of them from the water.

Heller shot three muntjac at Hui-yao, besides the doe which he killed on the first day. One of the largest bucks had a pair of beautiful antlers three and one half inches long from the burr to the tip. The skin-covered projections, or pedicels, of the frontal bone, from the summits of which the antlers grow, measured two and one-half inches from the skull to the burrs. Evidently the muntjac are somewhat irregular in shedding for, although they were all in full summer pelage, two already had lost their antlers while the other had not. I can think of no more delicious meat than the flesh of these little deer and they seem to be as highly esteemed by the English sportsmen of India as they are by the foreigners of China.

I did not see a muntjac while at Hui-yao, but was fortunate in killing a splendid coal-black serow which represents a sub-species new to science; although the natives said that serow were known to occur in the thick jungle on the south side of the river, none had been seen for years. Heller and I had gone to this part of the gorge to hunt for a troupe of monkeys which he had located on the previous day. We had separated, Heller keeping close to the water while I skirted the cliffs near the summit not far from the road which led through the pine forest.

I was walking just under the rim of the gorge when suddenly with a snort a large animal dashed out of a thicket below and to the left. I caught a glimpse of a great coal-black body and a pair of short curved horns as the beast disappeared in a shallow gully, and realized that it was a serow. A few seconds later it reappeared,

running directly away from me along the upper edge of the gorge. I fired and the animal dropped, gave a convulsive twist, rolled over, and plunged into the cañon.

As the serow disappeared we heard a chorus of excited yells from below, and it was evident that some natives near the water had seen it fall. I had slight hope that they might have rescued it from the river, but my heart was heavy as we worked along the cliff trying to find a place where it was possible to descend. A wood cutter whom we discovered a short distance away guided us down a trail so steep that it seemed impossible for a human being to walk along it, and in proof I slid the last half of the way to the rocks at the river's edge, narrowly escaping a broken neck.

When we reached the stream it was only to find a flat wall against which the water surged in a mass of white foam, separating us from the place where the serow had fallen. I tried to wade around the rock but in two steps the water was above my waist. It was evident that we would have to swim, and I began to undress, inviting Achi and the wood cutter to follow; the former refused, but the latter pulled off his few clothes with considerable hesitation.

It was a swim of only about forty feet around the face of the cliff but the current was strong and it was no easy matter to fight my way to the other side. After I had climbed out upon the rocks I called to the wood cutter to follow and he slipped into the water. Evidently the current was more than he had bargained for and a look of fear crossed his face, but he went manfully at it.

He had almost reached the rock on which I was standing with outstretched hand when his strength

seemed suddenly to go and he cried out in terror. I jumped into the water, hanging to the rocks with one hand and letting my legs float out behind. The wood cutter just managed to reach my big toe, to which he clung as if it had in reality been the straw of the drowning man and I dragged him up stream until, to my intense relief, he could grasp the rocks.

We picked our way among the boulders for a few yards and suddenly came upon the serow lying partly in the water. I felt like dancing with delight but the sharp rocks were not conducive to any such demonstrations and I merely yelled to Achi who understood from the tone, if not from my words, that the animal was safe.

The men who had shouted when the animal fell over the cliff were only fifty feet away, but they too were separated from it by a wall of rock and surging water. They said that there was an easier way up the cliff than the one by which we had descended, and prepared a line of tough vines, one end of which they let down to us. We made it fast to the serow and I kept a second vine rope in my hands, swimming beside the animal as they dragged it to the other shore. It was landed safely and the wood cutter was hauled over by the same means.

I had intended to swim back for my clothes but discovered that Achi had disappeared, taking my garments and those of the wood cutter with him. He evidently intended to meet us on the hilltop, but it left us in the rather awkward predicament of making our way through the thick brush with only the proverbial smile and minus even the necktie.

The men fastened together the serow's four legs, slipped a pole beneath them and toiled up the steep

slope preceded by a naked brown figure and followed by a white one. The side of the gorge was covered with vines and creepers, many of them thorny, and pushing through them with no bodily protection was far from comfortable.

When we arrived at the road on the rim of the gorge I was dismayed to find that Achi was not there with my clothes. The wood cutter did not appear to be greatly worried and indicated that we would find him farther up the road. I walked on dubiously, expecting every second to meet some person, and sure enough, a Chinese woman suddenly appeared over a little hill. I dived into the tall ferns beside the road, burrowing like a rabbit, and from the frightened way in which she hurried past, she must have thought she had seen one of her ancestral spirits stalking abroad. We eventually found the boy, and, decently dressed, I faced the world again with confidence and happiness.

On the way back to camp we saw a goral on the cliffs across the river. It was high up and fully three hundred and fifty yards away but, of course, quite unconscious of our presence. My first two shots struck close beside the animal, but at the third it rolled over and over down the hill, lodging among the rocks just above the river.

Our entry into camp was triumphal, for fully half the village acted as an escort to the serow, an animal which few had ever seen. It was a female, and probably weighed about two hundred and fifty pounds. The mane was short and black and strikingly unlike the long white manes of the Snow Mountain serows; the horns were almost smooth. Getting this specimen was one of

the lucky chances which sometimes come to a sportsman, for one might hunt for weeks in the same place without ever seeing another serow, as the jungle is exceedingly dense and the cliffs so steep that it is impossible to walk except in a few spots. The animal had been feeding on the new grass just at the edge of the heavy cover and probably had been sleeping under a bush when she was disturbed.

Besides mammals and birds we made a fairly good collection of reptiles and lizards at Hui-yao, but in all other parts of the province which we visited they were exceedingly scarce. In fact, I have never been in a place where there were so few reptiles and batrachians. We obtained only one species of poisonous snake here. It was a small green viper which we sometimes saw coiled on a low bush watching mouse holes in the grass. Several species of nonpoisonous snakes were more common but were nowhere really abundant.

We left Hui-yao the day after I killed the serow for a village called Wa-tien where there was a report of sambur. None of us had any real hope of finding the huge deer after our former unsuccessful hunts, but we camped in the early afternoon on an open hilltop five miles from Wa-tien where the natives assured us the animals often came to eat the young rice during the night.

We engaged four men with three dogs as hunters, but awoke to find a dense fog blanketing the valley and mountains. It was not until half past nine that the gray mist yielded to the sun and left the hills clear enough for us to hunt. We climbed a wooded ridge directly behind the camp and skirted the edge of a heavily forested ravine which the men wished to drive.

Heller took a position in a bean field while I climbed to a sharp ridge above and beyond him. In less than half an hour the dogs began to yelp in an uncertain way. I saw one of them running down hill, nose to the ground, and a few seconds later Heller fired twice in quick succession. Two sambur had skirted the edge of the wood less than one hundred yards away, but he had missed with both shots.

The trail led into a deep ravine filled with dense underbrush. In a few moments the dogs began to yelp again and, while Heller remained on the hillside to watch the open fields, I followed the hounds along the creek bed. Suddenly the whiplike crack of his Savage 250-300 rifle sounded five times in quick succession just above our heads, and we climbed hurriedly out of the gorge.

Heller shouted that he had fired at a huge sambur running along the edge of a bean field but the animal showed no sign of being hit. We easily picked up the trail in the soft earth and in a few moments found several drops of blood, showing that at least one bullet had found its mark. The blood soon ceased and we began to wonder if the sambur had not been merely scratched.

Heller had seen the deer disappear in a second ravine, a branch of the one out of which it had first been driven, and while he watched the upper side I worked my way to the bottom to look for tracks. A few moments later the natives began to shout excitedly just above me, and Heller called out that they had found the deer, which was lying stone dead half way down the side of the gorge in a mass of thick ferns. The sambur had been hit only once but the powerful Savage bullet had crashed through the shoulder into the lungs; it was quite suf-

ficient to do the work even on such a huge animal and the deer had run less than one hundred yards from the place where it had been shot.

It was a splendid male, carrying a magnificent pair of antlers which measured twenty-seven inches in length. The deer was about the size of an American wapiti, or elk, and must have weighed at least seven hundred pounds, for it required eight men to lift it. The Chinese hunters were wild with excitement, but especially so when we began to eviscerate the animal, for they wished to save the blood which is considered of great medicinal value. They filled caps, sacks, bamboo joints, and every receptacle which they could find after each man had drunk all he could possibly force down his throat and had eaten the huge clots which choked the thorax.

When the sambur was brought to camp a regular orgy was held by our servants, *mafus,* and dozens of villagers who gathered to buy, beg, or steal some of the blood. Our interpreter, Wu, took the heart as his perquisite, carefully extracted the blood, and dried it in a basin. The liver also seemed to be an especial desideratum, and in fact every part of the viscera was saved. Because the antlers were hard they were not considered of especial value, but had they been in the velvet we should have had to guard them closely; then they would have been worth about one hundred dollars (Mexican).

We expected from our easy hunt of the morning that it would not be difficult to get sambur, and indeed, Heller did see another in the afternoon but failed to kill it. Unfortunately, a relative of one of the hunters died suddenly during the night and all the men went off with their dogs to the burial feast which lasted sev-

A Mountain Chair

The Waterfall at Teng-yueh

eral days, and we were not able to find any other good hounds.

There were undoubtedly several sambur in the vicinity of our camp but they fed entirely during the night and spent the day in such thick cover that it was impossible to drive them out except with good beaters or dogs. We hunted faithfully every morning and afternoon but did not get another shot and, after a week, moved camp to the base of a great mountain range six miles away near a Liso village.

The scenery in this region is magnificent. The mountain range is the same on which we hunted at Ho-mu-shu and reaches a height of 11,000 feet near Wa-tien. It is wild and uninhabited, and the splendid forests must shelter a good deal of game.

The foothills on which we were camped are low wooded ridges rising out of open cultivated valleys, which often run into the jungle-filled ravines in which the sambur sleep. Why the deer should occur in this particular region and not in the neighboring country is a mystery unless it is the proximity of the great forested mountain range. But in similar places only a few miles away, where there is an abundance of cover, the natives said the animals had never been seen, and neither were they known on the opposite side of the mountain range where the Teng-yueh--Tali-Fu road crosses the Salween valley.

On May 20, we started back to Hui-yao to spend three or four days hunting monkeys before we returned to Teng-yueh to pack our specimens and end the field work of the Expedition. On the way my wife and I became separated from the caravan but as we had one of our servants for a guide we were not uneasy.

The man was a lazy, stupid fellow named Le Ping-sang (which we had changed to "Leaping Frog" because he never did leap for any cause whatever), and before long he had us hopelessly lost.

It would appear easy enough to ask the way from the natives, but the Chinese are so suspicious that they often will intentionally misdirect a stranger. They do not know what business the inquirer may have in the village to which he wishes to go and therefore, just on general principles, they send him off in the wrong direction.

Apparently this is what happened to us, for a farmer of whom we inquired the way directed us to a road at nearly right angles to the one we should have taken, and it was late in the afternoon before we finally found the caravan.

CHAPTER XXXVIII

LAST DAYS IN CHINA

It was of paramount importance to pack our specimens before the beginning of the summer rains. They might be expected to break in full violence any day after June 1, and when they really began it would be impossible to get our boxes to Bhamo, for virtually all caravan travel ceases during the wet season. Therefore our second stay at Hui-yao was short and we returned to Teng-yueh on May 24, ending the active field work of the Expedition exactly a year from the time it began with our trip up the Min River to Yeng-ping in Fukien Province.

Mr. Grierson had kindly invited us again to become his guests and no place ever seemed more delightful, after our hot and dusty ride, than his beautiful garden and cool, shady verandah where a dainty tea was served. Our days in Teng-yueh were busy ones, for after the specimens were packed and the boxes sealed it was necessary to wrap them in waterproof covers; moreover, the equipment had to be sorted and sold or discarded, a caravan engaged, and nearly a thousand feet of motion-picture film developed. This was done in the spacious dark room connected with Mr. Grierson's house which offered a welcome change from the cramped quarters of the tent which we had used for so many months.

Much of the success of our motion film lay in the fact that it was developed within a short time after

exposure, for had we attempted to bring or send it to Shanghai, the nearest city with facilities for doing such work, it would inevitably have been ruined by the climatic changes. Although cinematograph photography requires an elaborate and expensive outfit and is a source of endless work, nevertheless, the value of an actual moving record of the life of such remote regions is worth all the trouble it entails.

The Paget natural color plates proved to be eminently satisfactory and were among the most interesting results of the expedition. The stereoscopic effects and the faithful reproduction of the delicate atmospheric shading in the photographs are remarkable. Although the plates had been subjected to a variety of climatic conditions and temperatures by the time the last ones were exposed in Burma, a year and a half after their manufacture, they showed no signs of deterioration even when the ordinary negatives which we brought with us from America had been ruined. The other photographs, some of which are reproduced in this book, speak for themselves.

The entire collections of the Expedition were packed in forty-one cases and included the following specimens:

2,100	mammals
800	birds
200	reptiles and batrachians
200	skeletons and formalin preparations for anatomical study
150	Paget natural color plates
500	photographic negatives
10,000	feet of motion-picture film.

Since the Expedition was organized primarily for the study of the mammalian fauna and its distribution,

our efforts were directed very largely toward this branch of science, and other specimens were gathered only when conditions were especially favorable. I believe that the mammal collection is the most extensive ever taken from China by a single continuous expedition, and a large percentage undoubtedly will prove to represent species new to science. Our tents were pitched in 108 different spots from 15,000 feet to 1,400 feet above sea level, and because of this range in altitudes, the fauna represented by our specimens is remarkably varied. Moreover, during our nine months in Yün-nan we spent 115 days in the saddle, riding 2,000 miles on horse or mule back, largely over small roads or trails in little known parts of the province.

In Teng-yueh we were entertained most hospitably and the leisure hours were made delightful by golf, tennis, riding, and dinners. Mr. Grierson was a charming host who placed himself, as well as his house and servants, at our disposal, utter strangers though we were, and we shall never forget his welcome.

We decided to take four man-chairs to Bhamo because of the rain which was expected every day, and the coolies made us very comfortable upon our sleeping bags which were swung between two bamboo poles and covered with a strip of yellow oil-cloth. They were the regulation Chinese "mountain schooner," at which we had so often laughed, but they proved to be infinitely more desirable than riding in the rain.

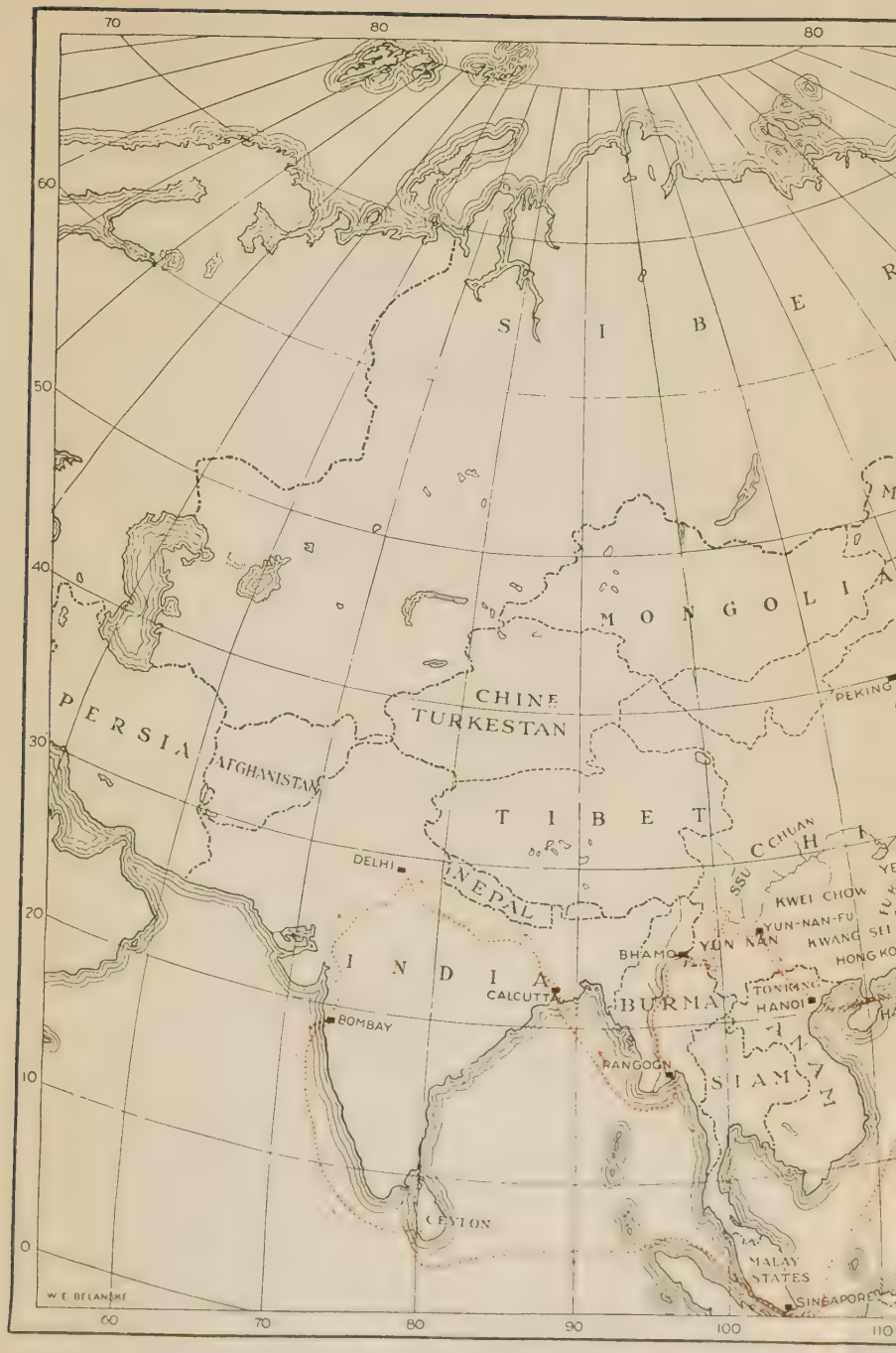
With the forty-one cases of specimens we left Teng-yueh on June 1, behind a caravan of thirty mules for the eight-day journey to Bhamo on the outskirts of civilization. Our chair-coolies were miserable specimens of humanity. They were from S'suchuan Province and

were all unmarried which alone is almost a crime in China. Every cent of money, earned by the hardest sort of work, they spent in drinking, gambling, and smoking opium. As Wu tersely put it "they make how much—spend how much!"

About every two hours they would deposit us unceremoniously in the midst of a filthy village and disappear into some dark den in spite of our remonstrances. We would grumble and fume and finally, getting out of our chairs, peer into the hole. In the half light we would see them huddled on a "kang" over tiny yellow flames sucking at their pipes. At tiffin each one would stretch out under a tree with a stone for a pillow and his broad straw hat propped up to screen him from the wind. With infinite care he would extract a few black grains from a dirty box, mix them with a little water, and cook them over an alcohol lamp until the opium bubbled and was almost ready to drop. Then placing it lovingly in the bowl of his pipe he would hold it against the flame and draw in long breaths of the sickly-sweet smoke. The men could work all day without food, but opium was a prime necessity.

It was almost impossible to start them in the morning and it became my regular duty to make the rounds of the filthy holes in which they slept, seize them by the collars and drag them into the street. Force made the only appeal to their deadened senses and we were heartily sick of them before we reached Bhamo.

The road to Bhamo is a gradual descent from five thousand feet to almost sea level. Because of the fever the valleys are largely inhabited by "Chinese Shans" who differ in dress and customs from the Southern Shans of the Nam-ting River. Few of the men were



THE RED LINE INDICATES THE TRAVELS OF THE

tattooed and the women all wore the enormous cylindrical turban which we had seen once before in the Salween Valley.

At noon of the fifth day we crossed the Yün-nan border into Burma. It is a beautiful spot where a foaming mountain torrent rushes out of the jungle in a series of picturesque cascades and loses itself in a living wall of green. The stream is spanned by a splendid iron bridge from which a fine wide road of crushed stone leads all the way to Bhamo.

What a difference between the country we were leaving and the one we were about to enter! It is the "deadly parallel" of the old East and the new West. On the one side is China with her flooded roads and bridges of rotting timber, the outward and visible signs of a nation still living in the Middle Ages, fighting progress, shackled by the iron doctrines of Confucius to the long dead past. Across the river is English Burma, with eyes turned forward, ever watchful of the welfare of her people, her iron bridges and macadam roads representing the very essence of modern thought and progress.

With paternal care of her officials the British government has provided *dâk* (mail) bungalows at the end of each day's journey which are open to every foreign traveler. They are comfortable little houses set on piles. Each one has a spacious living room, with a large teakwood table and inviting lounge chairs. In a corner stands a cabinet of cutlery, china, and glass, all clean and in perfect order. The two bedrooms are provided with adjoining baths and a covered passageway connects the kitchen with the house. All is ready for the tired traveler, and a boy can be hired for a

trifling sum to make the punkah "punk." Such comforts can only be appreciated when one has journeyed for months in a country where they do not exist.

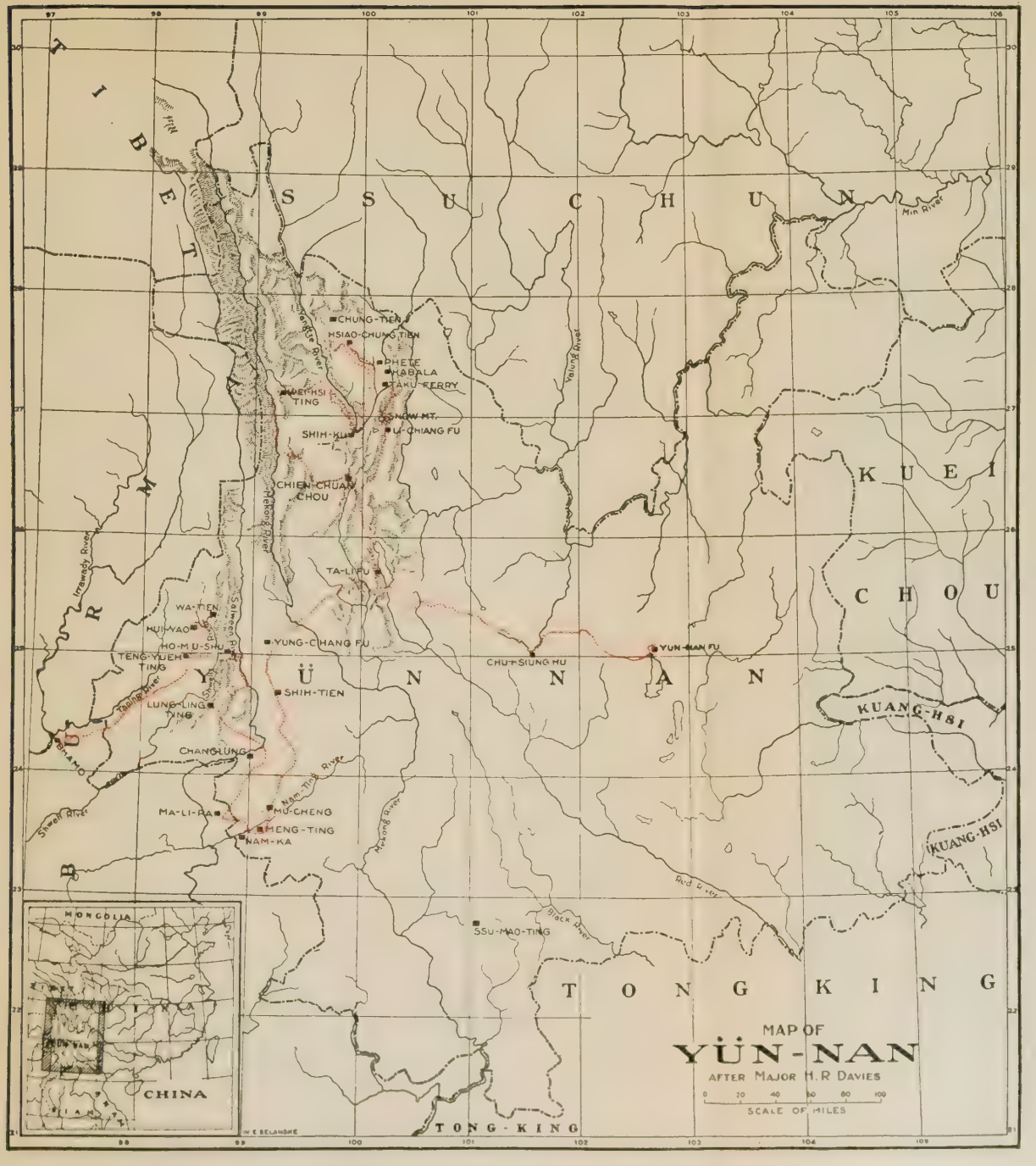
Our last night on the road was spent at a *dâk* bungalow near a village only a few miles from Bhamo. We were seated at the window, when, with a rattle of wheels, the first cart we had seen in nine months passed by. That cart brought to us more forcibly than any other thing a realization that the Expedition was ended and that we were standing on the threshold of civilization.

As Yvette turned from the window her eyes were wet with unshed tears, and a lump had risen in my throat. Not all the pleasures of the city, the love of friends or relatives, could make us wish to end the wild, free life of the year gone by. Silently we left the house and walked across the sunlit road into a grove of graceful, drooping palms; a white pagoda gleamed between the trees, and the pungent odor of wood smoke filled the air.

The spot was redolent with the atmosphere of the lazy East; the East which, like the fabled "Lorelei," weaves a mystic spell about the wanderer whom she has loved and taken to her heart, while yet he feels it not. And when he would cast her off and return to his own again she knows full well that her subtle charm will bring him back once more.

. . . . .

The next morning we entered Bhamo. It is a city of low, cool houses, wide lawns and tree-decked streets built on the bank of the muddy Irawadi River. Only a few miles away the railroad reaches Katha, and palatial steamers run to Mandalay and Rangoon. We called upon Mr. Farmer, the Deputy Commissioner,



ROUTE OF THE EXPEDITION IN YÜN-NAN

who offered the hospitality of the "Circuit House" and in the evening took us with him to the Club.

A military band was playing and men in white, well-dressed women, and officers in uniform strolled about or sipped iced drinks beside the tennis court. We felt strange and shy but doubtless we seemed more strange to them for we were newly come from a far country which they saw only as a mystic, unknown land.

On June 9, at noon, we embarked for the 1,200-mile journey to Rangoon, exactly nine months after we had ridden away from Yün-nan Fu toward the Mountain of Eternal Snow. Our further travels need not be related here. When we reached civilization we expected that our transport difficulties were ended; instead they had only begun. India was well-nigh isolated from the Pacific and to expose our valuable collection to the attacks of German pirates in the Mediterranean and Atlantic was not to be considered even though it necessitated traveling two thirds around the world to reach America safely.

We left Rangoon for Calcutta, crossed India with all our baggage to Bombay, and after a seemingly endless wait eventually succeeded in arriving at Hongkong by way of Singapore. There we separated from our faithful Wu and sent him to his home in Foochow. It was hard to say "good-by" to Wu, for his efficient service, his enthusiastic interest in the work of the Expedition, and, above all, his willingness to do whatever needed to be done, had won our gratitude and affection. We ourselves went northward to Japan, across the Pacific to Vancouver, and overland to New York, arriving on October 1, 1917, nearly nineteen months from the time we left. We were never separated from our collections

for, had we left them, I doubt if they would ever have reached America. It was difficult enough to gather them in the field, but infinitely more so to guide the forty-one cases through the tangled shipping net of a war-mad world.

They reached New York without the loss of a single specimen and are now being prepared in the American Museum of Natural History for the study which will place the scientific results of the Asiatic Zoölogical Expedition before the public.

. . . . .

The story of our travels is at an end. Once more we are indefinable units in a vast work-a-day world, bound by the iron chains of convention to the customs of civilized men and things. The glorious days in our beloved East are gone, and yet, to us, the Orient seems not far away, for the miles of land and water can be traversed in a thought. Again we stand before our tent with the fragrant breath of the pines about us, watching the glistening peaks of the Snow Mountain turn purple and gold in the setting sun; again, we feel the mystic spell of the jungle, or hear the low, sweet tones of a gibbon's call. We have only to shut our eyes to bring back a picture of the bleak barriers of the Forbidden Land or the sunlit streets of a Burma village. Thank God, we saw it all together and such blessed memories can never die.

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